

WESTERN REGIONAL HEALTH AUTHORITY

ANNUAL REPORT

2001

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The report was enhanced by those who diligently reviewed it and provided constructive comments and criticisms as editors. To those persons, I express deep appreciation.

I thank those who provided unfaltering secretarial services and support.

EXECUTIVE SUMMARY

It is a privilege to submit the 2001 Annual Report for the Western Regional Health Authority (WRHA).

The WRHA has a responsibility to our clients, employees, communities, contractors and our country. The Authority is accountable for the delivery of comprehensive health care services in the region and endeavours to live up to its vision and mission.

The WRHA is mindful of the commitment and untiring effort of all team members.

The WRHA is also grateful for the agencies/organizations that collaborated with the health related activities of all the parishes in the region.

- overseas medical team (Ball State University)
- ministries/state agencies
 - Ministry of Water and Housing
 - Natural Resource Conservation Authority
 - Rural Agricultural Development Agency
 - Tourism Product Development Company
 - Social Development Commission/Parish Development Committee
 - Local Board of Health
 - Jamaica Tourist Board
 - Parish Disaster Committee
 - HEART Trust
 - Western Parks and Markets
 - Women's Centre
- non-government organizations/private partners
 - Cancer Society
 - Diabetes Association
 - Grace Kitchens
 - Kiwanis Club

Performance Highlights

Monthly board meeting continued to promote a culture of high standards, integrity and transparency while the in-house managers and other members of the management team reinforced respect for clients and their families, team members and the community at large. The region's performance demonstrates consistent efforts to improve health status.

- During 2001, **Internal Auditing** activities focused on completing Audit Queries for 2000/2001 achieving an 85% completion rate. **Financial Management** Department identified a 9% increase in grants to the region. Staff costs continued to use the largest portion (84% in 2001) of the budget. Thus, outstanding liabilities was J\$ 134,353,740, demonstrating an increase of 9 million dollars.
- The availability of some categories of **Human Resource** (Registered Nurses, Pharmacists, Public Health Inspectors) has been challenging, creating an adverse relationship with quality of service and some planned programmes.
- While all the vehicles owned by the WRHA were on a planned preventive maintenance programme, only 40% of critical equipment were on that programme. Despite this, **maintenance** activities ensured minimum downtime.
- Within the four parishes making up the WRHA, the **provision of services** included Primary Health Care (PHC) which met the need for promotive/preventive/curative care of the population, while four hospitals provided specialist, regular and continuing medical/surgical care for the citizens.
- Using special and other events, **health promotion/health education** activities reinforced the related skills that support healthy lifestyle.
- **Nutrition programmes** in PHC and hospital facilities supported the healthy lifestyle concept from pregnancy through old age.
- **Home Visits** encourage acceptable corage of infants, children and mothers and also programmes of a supportive/intervention nature.
- **Dental Health services** experienced an increase in visits and preventive programmes increased.

Care seeking behaviour at WRHA in terms of the conditions that motivated visits to PHC or (admission) discharge from hospitals were not always similar to that of the national level.

- Visits to WRHA **PHC facilities** for care were mainly for Diseases of the Circulatory System; Diseases of the Genito-urinary System and Gynaecological Disorders; Diseases of the Skin; Diseases of the Respiratory System and Diabetes and Hypertension.
- **Hospital Discharges** were for patients with conditions relating to Obstetrics, Accident and Injuries, Diseases of the Circulatory System and Diseases of the Respiratory System.
- **The National Health Priorities** are geared to the promotion of health, prevention of illness and management of illness/disease in a national development context.
 - **Environmental Health:** The region's focus continued to be on food safety, water quality, sanitation, vector control indices and participation in development activities. The population that had access to treated water supplies was approximately 77%.
 - **Communicable Disease Control:** Surveillance activities continued to monitor selected notifiable and other diseases of national interest. The Region achieved 92% immunization coverage for the major vaccine preventable diseases.
 - Data for primary health care visits for **Chronic Non-Communicable Diseases** revealed that hypertension represented approximately 90% (25,591) of all visits (28,361) to WRHA for Diseases of the Circulatory System. Respiratory Tract Infections represented 88% (11,952) of the region's visits for Diseases of the Respiratory System (excluding Asthma).
 - **Child Health** data indicated that twenty-six percent (26%) of babies in the region were exclusively breastfed (6 and 12 weeks). Data relating to the nutrition status of children 0-35 months revealed that while 22.8% were adjudged normal, 23.6% were above normal. Just about 15.8% (22,725) children were seen in WRHA Accident and Emergency (A&E) facilities. Causes of morbidity among the children reflected Perinatal

Conditions; Diseases of the Respiratory System and Accident and Injuries in rank order.

Eleven hundred (1,100) adolescents with Rheumatic Fever in WRHA received 2,513 prophylactic treatments in 2001. Among this age group, there were 201 with haemoglobin levels less than 10gm and 24 syphilis positive visiting public antenatal facilities in WRHA. The region treated 72% and 29.1% respectively for these conditions. Hospital discharges were mainly for Obstetric Conditions (59.1%) and Accidents and Injuries (14.1%) among this age group.

- **Reproductive Health** data revealed that discharges for Obstetric Conditions continued to be the major cause of discharge (10,682) at WRHA (and nationally) while for Genito-urinary conditions, it was 1,132 cases. Of the 105,125 visits to primary health care facilities, 17.4% were made at WRHA.
- At WRHA, there were 6,176 visits to PHC facilities for **psychiatric care** and 1,671 cases were treated in A&E.

Community Mental Health clinic cases increased by 30.5% in WRHA. Discharge data recorded a decline of 17.1% (87) in the number of discharges from WRHA for psychiatric illnesses.

- **Emergency Health Services** data for WRHA revealed that when compared to year 2000, A&E cases relating to Medical Conditions increased by 12% and Paediatric Conditions by 16.6% while both continued to be the leading A&E cases.
- In terms of **mortality**, the data revealed that in the WRHA, the three leading causes in rank order were Diseases of the Circulatory System; Infectious and Parasitic Diseases and Diseases of the Respiratory System.

1.0 THE CONTEXT

1.1 National

1.2 Western Regional Health Authority (WRHA)

1.3 Population Profile

1.0 THE CONTEXT

1.1 National

Jamaica is positioned 45 kilometres south of Cuba and 161 kilometres west of Haiti. The island has a total land mass of 10,991 square kilometres. A land of mountains, plateaux and plains, the highest peak is the Blue Mountains at an elevation of 2256 metres.

The island has a maritime tropical climate with temperatures ranging from 26.2 degrees Celsius to 31 degrees Celsius. The island lies in the hurricane belt and the rainfall occurs mainly in May and October. There are fourteen parishes and two major urban centres – Kingston in the South East and Montego Bay on the North West coast.

An independent state in the Commonwealth of Nations, since 1962, the Governor General represents the Queen. The executive arm of the parliamentary democracy is headed by the Prime Minister.

The Western Region of the island occupies portions of the northern and southern coasts and all of the western coastline. Included are the parishes of Trelawny (874.6 km); St. James (594.9 km); Hanover (450.4 km); and Westmoreland (867.4 km). The area has mostly calm, clear seas and white sand beaches, backed by flat, raised plains and coral reefs. Home to the island's second airport and teeming with beaches, hotels and guest houses, the area serves as the tourist mecca of Jamaica.

The major economic activities emanate from the tourism product. Agriculture, manufacturing and information also contribute to the economy.

1.2 The Western Regional Health Authority (WRHA)

The WRHA was established by an Act of Parliament in 1997 to respond to the health needs of citizens and visitors to the region. It began operations in 1998.

The management structure consists of a:

- Board of Directors nominated by the Honourable Minister of Health
- Regional Director (RD) that manages all the related affairs of the Region
- Regional Technical Director (RTD)

- Director of Finance
- Director of Human Resource
- Director of Management Information Systems
- Director of Operations and Maintenance

The coordination and delivery of all health care services reside at the parish level.

1.3 Population Profile

Table 1.1 End of Year Population: Jamaica, WRHA and Parishes 2000-2001

Years	Jamaica	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
2000 (Base Year)	2,597,080	452,739	73,075	174,043	67,128	138,493
2001	2,612,396	455,199	73,084	175,729	67,018	139,305

Source: Demographic Statistics 2006

While Jamaica's end of year 2000 population was estimated to be 2,597,080, in 2001 it grew by 15,316 (0.6%). Similarly, there were changes in the end of year population of the WRHA. There was a 0.5 percentage change, (2,460) above that of the base year. There were also small changes in the estimated end of year population in all the parishes. St. James registered the highest change, an additional 1,686 persons (Table 1.1).

Table 1.2 End of Year Population by Age Groups – Jamaica, WRHA and Parishes 2001

AGE GROUP (In Years)	JAMAICA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
0-4 years	270,818	50,099	8,516	18,569	7,746	15,268
5-9 years	294,656	52,757	8,658	20,341	7,472	16,286
10-19 years	301,751	87,873	14,779	34,418	13,062	25,614
20-49 years	655,375	181,933	26,686	75,789	25,446	54,012
50-59 years	174,258	32,545	5,790	11,493	4,848	10,414
60-69 years	125,368	23,291	4,062	7,414	3,627	8,188
70 and Over	140,406	27,044	4,994	7,704	4,817	9,529
Total Population	2,612,395	455,199	73,084	175,729	67,018	139,305

Source: Demographic Statistics 2001

Based on the above data, 17.5% of Jamaica's population resided in the WRHA. Approximately 29% (87,873) of the region's population were in the 10-19 age group while 27.8% (181,933) were in the 20-49 age group (Table 1.2).

While the largest number of the 10-19 year olds (34,418) and 20-49 age groups (75,789) resided in the parish of St. James; it was Westmoreland that has the largest numbers of 60-69 (8,188) and 70 and over (9,529) age groups (Table 1.2).

2.0 MANAGEMENT AFFAIRS

2.1 Organizational Chart

2.2 Management Team

2.3 Health Services Management

2.4 The Health Services

2.1 ORGANIZATIONAL CHART - Western Regional Health Authority

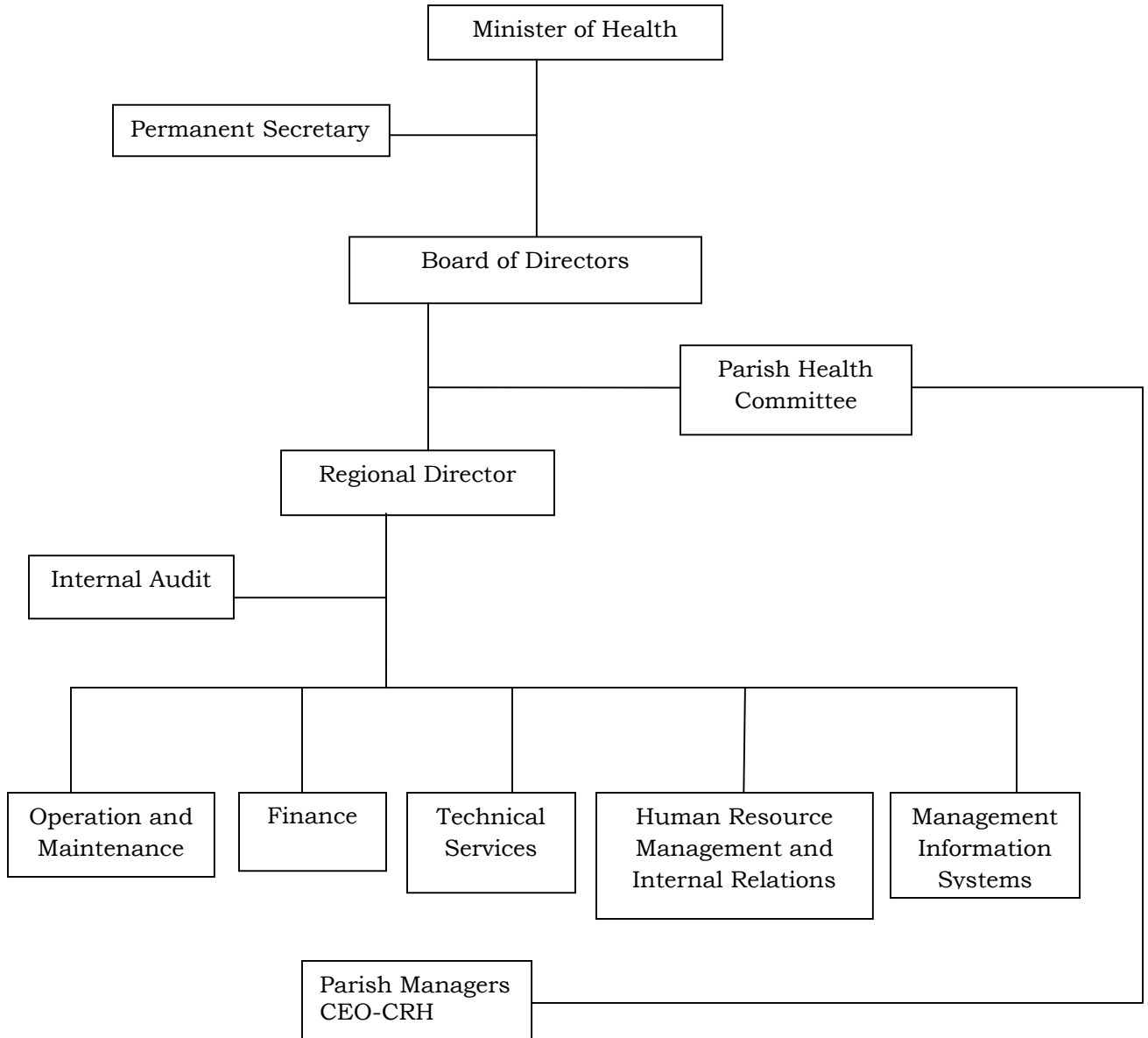


Figure 1.1 Organizational Chart - WRHA

2.2 THE MANAGEMENT TEAM

Board of Directors

Mr. George Duncan Board Chairman
Councillor Ronald Anglin
Mr. Winston Comrie
Dr. Barrington Dixon
Mr. Delro Hewling
Ms. Michelle Levermore
Mrs. Florence Logan
Mr. Clive Mullings
Mrs. Stephanie Reid
Mrs. Erma Ridguard
Ms. Faith Thomas
Councillor Dr. Ucal Thompson
Mrs. Mavis Whitter-King
Mr. Winston Wright

The In-house Managers

Dr. Sheila Campbell Forrester	Regional Director (RD)
Dr. Alexander Konstantinov	Regional Technical Director (RTD)
Mr. Raymond Kitson-Walters	Director of Finance
Mr. Arthur Warren	Director, Human Resource and Industrial Relations
Miss Thora Palmer	Director, Operations and Maintenance
Mr. Paul Anderson	Director, Management Information System

The Senior Members of the Parish Team

Mrs. T. Fider	Parish Manager, Trelawny
Dr. Ponnado	Medical Officer (Health) (MO(H), Trelawny
Mrs. Doreen Bernard	Parish Manager, St. James
Dr. Olukoga	Medical Officer (Health) (MO(H), St. James
Dr. Michele Roofe	Parish Manager / Medical Officer (Health) (MO)H), Hanover
Mr. Verley James	Parish Manager, Westmoreland
Dr. Kyaw Tint	Medical Officer (Health) (MO(H), Westmoreland

2.3 HEALTH SERVICES MANAGEMENT

The health care problems and the needs as well as expectations of individuals, families and communities demand that the region remain focussed in its mandate. Flexibility and innovativeness have been part of the management strategy at the regional and operational levels.

2.3.1 Vision

Healthy families living in healthy communities.

2.3.2 Mission

The mission of Western Regional Health Authority encompasses the tenets of public health:

- To provide quality preventative, curative and rehabilitative health care that is affordable, accessible and reliable to the population of the region;
- To provide and maintain facilities and conditions conducive to the promotion of health;
- To attract, train, motivate and retain a high calibre of staff and to provide opportunities for the development of our employees to their fullest capabilities.

2.3.3 Resources for the Health Sector

The health sector uses a large volume of financial, human and infrastructural resources in all its operations.

2.3.3.1 Finance

As a statutory body, the WRHA is funded through grants for the programme Health Service Delivery. In keeping with the FAA Act and International Financial Accounting Standards, appropriate accounting policies were utilized to achieve the region's mandate.

Table 2.1 Health Service Financing \$'000: WRHA 2000-2001

SOURCES	Base Year 2000	Year 2001
Budgets/Grants	948.4*	1,072,745
Actual Fees Collected	156.2*	156,190
Other Income	DNA	10,678
TOTAL		1,623,062

Source: WRHA Finance & Accounts Department Report 2000 – 2001

* MOH Jamaica Annual Report 2001

In 2001, the allocated grant represented an increase of approximately 9% above that of the base year, while the increase in fee collection was less than the base year (Table 2.1).

Table 2.2 Health Service Delivery Expenditure \$'000: WRHA 2001

Objects of Expenditure	2001
Staff Cost	1,366,924
Rental	1,683
Public Utilities	46,155
Other Operating Expenditure	206,427
Capital Items	2,165
TOTAL	1,623,354

Source: WRHA – Finance and Accounts Department Report 2001

The total expenditure for year 2001 was J\$ 1,623,354. Staff cost represented approximately 84% while other operating costs was 12.5%. The least cost item was rental at \$1,683.000 (Table 2.2). When examined against income (Table 2.1) the funding met expenditure requirements.

Table 2.3 Outstanding Liabilities \$ '000: WRHA 2000-2001

Liabilities	2000	2001
Drugs & Medical Supplies	73,951,541	83,221,087
Statutory Deductions	45,826,362	21,307,532
Utilities	19,346,397	21,584,028
Other	20,648,137	8,241,093
Total	159,772,437	134,353,740

Source: WRHA – Finance & Accounts Department Report 2000-2001

Outstanding liabilities was J \$134,353,740 an increase of J \$9,269,546 over the base year. Drugs and Medical Supplies represented 61.9% of the total liabilities (Table 2.3).

Table 2.4 Emoluments (J\$) for Senior Managers: WRHA 2001

Position	EMOLUMENTS				
	Salary	Motor Vehicle/	Uniform/ Clothing	Other	Vacation
- Regional Board Member	AS STIPULATED BY GOVERNMENT SCHEME				
- Regional Director	1,468,298.72	160,014.00	-	1,224,080.22	40 days v/1
- Regional Technical Director	1,711,395.04	134,780.00	16,729.00	2,335,396.03	80 days v/1
- Director of Finance	1,227,087.00	423,908.04	29,378.22	31,774.68	91 days v/1
- Director of Human Resource and Industrial Relations	1,308,612.01	412,050.40	28,589.28	21,774.68	74 days v/1
- Director of Operations and Maintenance	1,281,042.13	32,028	33,771.40	8,640.00	15 days v/1
- Director of MIS	971,643.00	168,816.00	22,230.00	205,985.28	

Source: WRHA

2.3.3.2 Human Resource

The health system utilizes highly-skilled, multi-disciplinary human resource teams in carrying out its functions. However, the major challenges included the availability of staff to meet the needs of service delivery.

Table 2.5 WRHA Staff Profile – 2001

CATEGORY	CADRE	NO. IN POST
Medical Group – Consultants	*	22
- Residents	196	88
- Interns	*	*
Dental Group – Dentists	11	16
- Dental Nurses	26	23
- Dental Assistants	22	19
Nursing Group – Enrolled Nurses	255	183
- Midwives	144	76
- Registered Nurses	466	205
- Public Health Nurses	*	*
- Nurse Practitioner	*	*
- Family	13	12
- Anaesthetist	*	*
Mental Health Officers	*	*
Diagnostic Group – Medical Technologists	35	25
- Radiographers	*	*
Therapeutic Group – Pharmacists	33	11
- Pharmacy Technicians	20	13
- Physiotherapists	*	*
- Nutritionists	3	2
- Nutrition Assistants	3	3
- Dieticians	2	7
- Therapeutic Radiographers	10	*
Public Health Inspectors	105	84
Health Educators	12	9
Community Peer Educators	*	26
Community Health Aides	159	179
Management Group – Directors	5	5
- Parish Managers	4	4
- Accounting	48	37
- Clerical	*	*
Support Staff - Drivers	41	43
- Security Officers	25	28
Maintenance and Operations	*	32
Janitorial	CONTRACTED OUT	
Relievers	*	173

The ease with which professionals, e.g. nursing, pharmacy and public health personnel were available to deliver services, impacted negatively on the quality of care (Table 2.5).

Training was organized to support service delivery among nursing, public health and pharmacy personnel as well as on capacity building in specific areas of management.

Liaison with Churches Cooperative Credit Union facilitated the financial aspects of staff welfare. The industrial relations climate was very calm.

2.3.3.3 The Infrastructure

The assets of the WRHA include several buildings used for inpatient, outpatient and community care as well as equipment/technology and motor vehicles.

Table 2.6 The Infrastructure, Operations and Maintenance: WRHA and Parishes 2001

VARIABLES	WRHA		Trelawny		St. James		Hanover		Westmoreland	
	Hospital	PHC	Hospital	PHC	Hospital	PHC	Hospital	PHC	Hospital	PHC
Buildings										
- Maintenance plan	2	-	-	-	1	-	-	-	1	-
- No. of maintenance activities			257	33	1542	100	102	33	386	33
- Total Work Order	38	55	-	-	-	-	-	-	-	-
Equipment										
- % on PPM Programme	-	-	30	-	30	-	50	-	50	-
- No. of PPM activities	-	-	50	-	288	-	6	-	143	-
- % Downtime on										
- Standby Generator	-	-	-	-	-	5	5	-	15	-
- Elevators	-	-	-	-	-	-	-	-	15	-
- Boilers	-	-	3	-	3	-	3	-	3	-
- Laboratory	-	-	5	-	10	-	-	10	5	-
- X-Ray	-	-	-	-	5	-	-	-	3	-
- Anaesthetic	-	-	5	-	5	-	-	-	5	-
- Autoclave/Sterilizer	-	-	15	-	20	-	3	-	15	-
- Operating Table	-	-	5	-	5	-	-	-	15	-
- Operating Theatre: light	-	-	10	-	5	-	-	-	10	-
- Equipment	-	-	5	-	5	-	-	-	5	-
- Laundry Equipment	-	-	30	-	20	-	30	-	10	-
- Central A C	-	-	15	-	33	-	-	-	15	-
- Incinerators	-	-	-	-	15	10	15	-	15	-
Motor Vehicle										
- No. of Vehicles	3	-	2	-	-	-	1	-	-	-
- Other	1	6	1	1	-	4	-	2	-	-
- % on PPM Programme	100	100	100	100	100	100	100	100	100	100
- Average Annual Downtime: - Ambulance (days)	36	-	24	-	-	-	42	-	-	-
-Other	12	15	12	12	-	20	-	20	-	-
Assets Management										
- % Inventorized	*	*	*	*	*	*	*	*	*	*
- % replaced	*	*	*	*	*	*	*	*	*	*
- % on Replacement Plan	*	*	*	*	*	*	*	*	*	*

Source: WRHA Operations and Maintenance
*DNA

During 2001, 100% of all motor vehicles owned and operated by the region were on a planned, preventive maintenance programme. Forty percent (40%) of all critical equipment was on a similar programme and there were 487 preventive maintenance activities implemented (Table 2.6).

Annual downtime was highest for laundry equipment (23%), central air conditioning (21%), elevators (15%), autoclave and incinerator (14% respectively). Motor vehicles experienced 22 days downtime during 2001 (Table 2.6).

2.3.3.4 Management Information

Using a staff of two – one director and one support person, estimates for regional and parish needs and concepts were developed. Additionally, focus was on the acquisition and development of hardware and software for the WRHA.

2.4 THE HEALTH SERVICES

2.4.1 Provisions of Service / Programmes

Health services include the public, private and NGO institutions, facilities/departments that are managed, equipped and staffed to deliver promotive, preventive, curative and/or rehabilitative health care to individuals, families or communities.

The WRHA provided public health care services that are in keeping with nationally mandated programmes that address epidemiological, age, gender, diagnostic and medical/ surgical concerns /interventions.

2.4.1.1 Health Promotion

2.4.1.1.1 Health Education

Health promotion/health education is a strategy that is implemented in all health care services/ programmes to encourage the acquisition and use of knowledge/information in order to maintain/improve individual, family and community health. It involves changes in behaviour/lifestyle and thus the messages are transmitted using varying medium and are designed to encourage and support these changes.

Although the majority of health promotion/health education strategies were implemented at the primary health care level, there were activities in hospitals which tend to use the model of face to face interpersonal communication among patients and caregivers.

During the year 2001, the following activities were undertaken in schools and communities:-

- Improving/reinforcing life skills that support healthy lifestyles. Special Events of international and national significance, e.g. World Health Day, National Breastfeeding Week, among others were used as the springboard to launch the concepts among adolescents in and out of school.
- Promote and facilitate the concept of Health Promoting Schools among four (4) schools in the region. School health visits; building alliances with PTA; needs assessment; programme development and implementation ensued.

2.4.1.1.2 Nutrition

Nutrition is intimately related to the delivery of health care and as a specific strategy is threaded throughout several programmes – Child Health, Reproductive Health, Chronic, Non-communicable and other nutrition related diseases and Communicable Disease Control.

In this regard, the focus was on exclusive breastfeeding, assessment of the nutritional status of children, the prevention and management of anaemia in pregnancy, the nutrition management of non-communicable and other diseases as well as ensuring replacement feeding for children born to HIV positive women.

2.4.1.1.3 Home Visits

Table 2.7 Home Visits: Jamaica and WRHA 2000-2001

HOME VISITS	2000		2001	
	JA	WRHA	JA	WRHA
Total	383,558	50,547	361,386	49,387
Maternal	8.9	11.6	8.9	11.4
Child	46.8	41.4	48.6	44.0
Other	44.3	47.0	42.5	44.6

Source: MOH: MCSR 2000-2001

Home visit is a strategy that straddles promotive, preventive, health maintenance as well as disease management activities.

Examined against base year data, 2001 data revealed that home visits in the WRHA were higher than the national figures, for maternal and other visits. Visits for child health, though representing 44% of the region's home visit, was less than the national figure. Total home visits fell by 1,160 (Table 2.7).

Seventeen hundred and forty-five (1,745) cases were visited at home to support the maintenance/intervention for psychiatric care (WRHA – Community Mental Health Report 2001).

2.4.1.2 Services /Facilities

Jamaica has twenty-three (23) public and two (2) quasi public hospitals, and there are approximately eleven (11) private hospitals (Table 2.8).

Table 2.8 Provisions/Availability of Public Health Services: Jamaica, WRHA and Parishes 2001

Health Facilities	JA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Health Centres:						
- Type I	128	42	10	14	8	10
- Type II	87	25	7	6	7	5
- Type III	72	13	2	3	2	6
- Type IV	6	3	1	0	1	1
- Type V	4	1	0	1	0	0
Dental Clinic	8	4	1	1	1	1
Family Planning Clinic	3					
Rural Maternity Centres						
Hospitals:						
- Type A	3	1	0	1	0	0
- Type B	4	1	0	0	0	1
- Type C	11	2	1	0	1	0
- Specialist	6	1	0	0	0	0
Laboratory Services	13	2	1	1	0	1
Radiography Services	16	2	1	1	0	1
Pharmacy: Hospital	20	4	1	1	1	1
Physiotherapy	9	2	0	1	0	1
Blood Banking	11	2	0	1	0	1
Radiation/Oncology	2	1	0	1	0	0

Source: MOH: HMSR, MCSR 2001

The WRHA is home to four public hospitals viz:-

- Cornwall Regional, providing a range of interdependent, complex diagnostic, curative and emergency services
- Savanna-la-mar, delivering specialist medical, surgical, obstetrics, gynaecology and paediatric services
- Falmouth, providing basic, non-specialist inpatient and outpatient care in medicine , surgery , obstetrics, gynaecology and paediatric

- Noel Holmes in Hanover offers basic, non-specialist inpatient and outpatient care in medicine, surgery, obstetrics, gynaecology and paediatric.

The region boasts approximately 84 primary health care facilities and its diagnostic support is bolstered by two (2) laboratories and two (2) radiographic units; one each at Cornwall Regional and Savanna-la-mar hospitals respectively. The Western Regional Health Authority operates public pharmacies at the hospital and community level. Physiotherapy, Blood Banking and Radiation Oncology services are included among the therapeutic services (Table 2.8).

2.4.2 UTILIZATION OF SERVICES/PROGRAMMES

The Western Regional Health Authority responds to a variety of individual, family and community health needs at the primary, secondary and tertiary levels of care. The services are integrative, addressing illness prevention, health promotion, diagnosis and interventions of medical or surgical nature.

2.4.2.1 Dental/Oral Health Services

Table 2.9 Utilization of Dental/Oral Health Services: WRHA 2001

DENTAL HEALTH ACTIVITIES	2001
Primary Care – Visits (Total)	28,105
• Preventive Procedures Restoration	27,179
(i) Posterior Filling	9,339
(ii) Anterior Filling	1,516
Cleaning	13,551
Orthodontic	5
Other Preventive	
- Clinic	2,037
- School	731
• Extractions	13,403
• Dentures	15
• Other Procedures	17,936
Hospital Care - Surgery	
- Emergency	33
- Elective	118
- Day	20
Outpatient Clinic	
- Total Cases	2,809
- New Cases	0

Source: MOH: MCSR, HMSR 2001

In year 2001, at WRHA there were 28,105 visits for dental care and the number of preventative procedures far exceeded extractions. The number of surgical cases (2,809, dental/faciomaxillary) were mainly elective cases (Table 2.9).

2.4.2.2 Primary Health Care (PHC) Services

Table 2.10 Primary Health Care Visits: Jamaica, WRHA and Parishes 2000-2001

YEAR	JAMAICA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Base Year 2000	1,684,222	337,446	DNA	DNA	DNA	DNA
2001	1,610,959	309,753	63,567	112,786	62,559	70,841

Source: MOH: MCSR 2000-2001; MOH – Jamaica Annual Report 2001

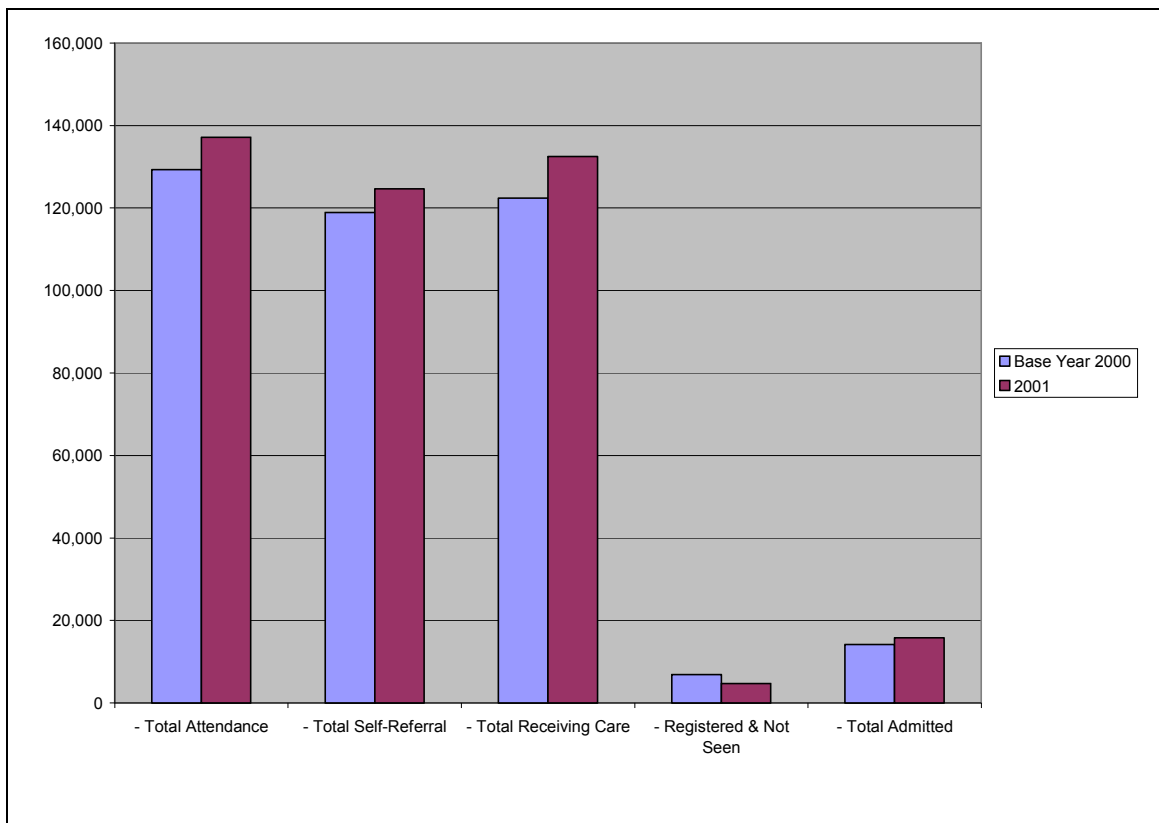
While representing 19.3% of all public primary health care visits on the island in 2001, the WRHA had an approximate decline of 8.2% when compared to the base year of 2000 (Table 2.10).

The parish of St. James had 36.5% of all primary health care visits in the region.

2.4.2.3 Hospital Services – Accident & Emergency (A&E)

When compared to the base year (2000) WRHA 2001 data reflects increases in attendance, self referral, those receiving care and the number of admissions. Those receiving care increased by 10,038(8.2%). The number registered and not seen fell by (2,163), while the number of admissions increased by 1,592. (Figure 2.1) (TABLE A1)

Figure 2.1 Utilization of Accident and Emergency (A&E) Services: WRHA 2000- 2001



Source: MOH: HMSR 2000-2001

Table 2.11 Utilization of Accident and Emergency (A&E) Services: Jamaica, WRHA and Parishes 2001

Accident & Emergency	Jamaica	WRHA	PARISHES			
			Trelawney	St. James	Hanover	Westmoreland
- Total Attendance	667,321	137,163	20,091	66,700	14,862	35,510
- Total Self-Referral	533,093	124,622	17,146	61,312	13,338	32,826
- Total Receiving Care	655,096	132,426	19,960	64,484	14,494	33,488
- Registered & Not Seen	12,225	4,737	131	2,216	368	2,022
- Total Admitted	88,478	15,805	3,020	8,253	446	4,086

Source – MOH: HMSR 2001

When examined against national data, approximately 20% of total attendance was made to A&E facilities in the WRHA. The region delivered care to 20% of all persons seeking that service in the public sector. Seventeen point nine percent (17.9%) of all admissions to hospital emanated from the WRHA A&E services. Some 96.5% of all patients seeking care at A&E departments in the region received care (Table 2.11)

Among the parishes in the WRHA, Trelawny had the lowest number of those registered and not seen (131), while 49.2% of all self referrals in the region went to Cornwall Regional Hospital, St. James (Table 2.11).

2.4.2.3 Hospital Services - Inpatient

Table 2.12 Provision and Utilization of Inpatient Services: WRHA 2000 - 2001

Inpatient Services	Base Year 2000	2001
- Bed Complement	596	553
- Bed Occupancy Rate	78.0	86.1
- Discharges Including Deaths	29,775	31,395
- Average Length of Stay	5 days	5.5 days
- Turnover Rate	48.7	56.0

Source: MOH: HMSR 2000-2001

There were 553 beds in the WRHA in 2001, 43 less than in the base year. However, each bed was used 56 times and the occupancy rate was 86.1% in 2001 versus 78.0% in 2000. The data demonstrate that discharges increased by 1,620 and the average length of stay increase minimally (0.5 days) (Table 2.12).

Table 2.13 Provision and Utilization of Inpatient Services: Jamaica, WRHA and Parishes 2001

Inpatient Services	Jamaica	WRHA	PARISHES			
			Trewlawny	St. James	Hanover	Westmoreland
- Bed Complement	3,670	553	60	317	38	138
- Bed Occupancy Rate	84.6	86.1	77.0	89.5	74.6	58.3
- Discharges Including Deaths	173,700	31,395	3,695	17,616	1,335	8,749
- Average Length of Stay	6.0	5.5	4.6	5.9	7.3	4.9
- Turnover Rate	46.6	56.0	61.2	54.5	35.1	62.9

Source: MOH: HMSR 2001

The Western Regional Health Authority had 15% (533) of all public hospital beds (3,670) in 2001 and had a turnover rate of 56.0% which was higher than the national figure of 46.6%. The bed occupancy rate was 1.5 percentage point higher than the national figure (84.6%) and the average length of stay 0.5 percentage points less (Table 2.13).

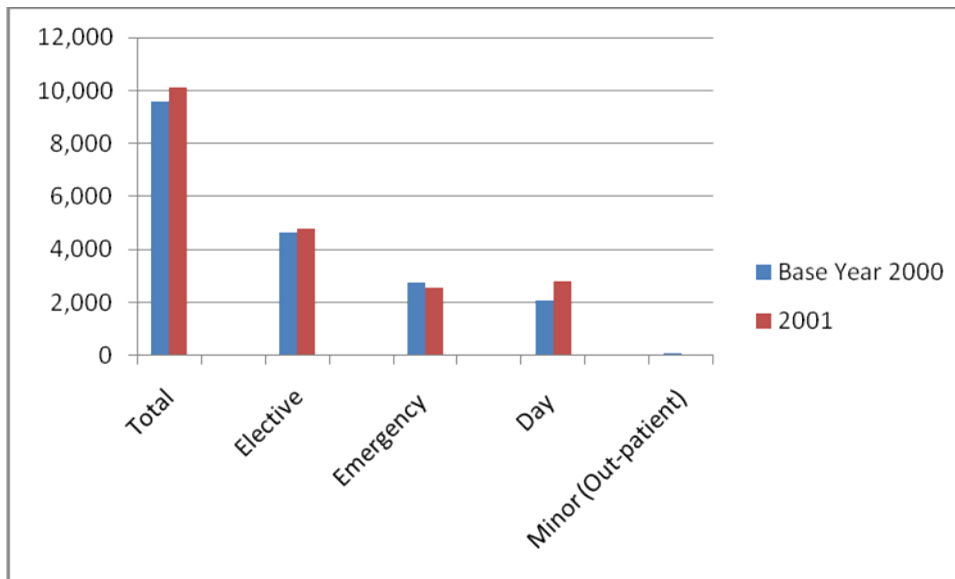
When parish data were examined, Hanover had 38 beds and a bed occupancy rate of 74.6%. However the data demonstrated that turnover rate (35.1%) and the average length of stay (7.3 days) exceeded that of national and regional figures as well as other parishes in the region in 2001 (Table 2.13).

2.4.2.3 Hospital Services – Surgery

For the purpose of this report, the total includes all surgery done as indicated in the figure below.

There was a 5.3% (548) increase in the entire surgery workload of the WRHA in 2001 when examined against the base year figures. In 2001 elective surgery exceeded emergency surgery by 2,225 and day surgery increased by 33% (693). Minor (out-patient) surgery plummeted to 2.3% (18) of the base year figure (Figure 2.2). (TABLE A2)

Figure 2.2 Utilization of Surgical Services: WRHA 2000-2001



Source: MOH HMSR 2000-2001

Table 2.14 Utilization of Surgical Services: Jamaica, WRHA and Parishes 2001

Surgery	Jamaica	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Total	49,403	10,108	726	6,460	57	2,865
Type - Elective	21,752	4,767	255	2,989	57	1,466
- Emergency	13,906	2,542	99	2,052	-	391
- Day	8,542	2,781	372	1,401	-	1,008
- Minor (Out-patient)	5,203	18	-	18	-	-

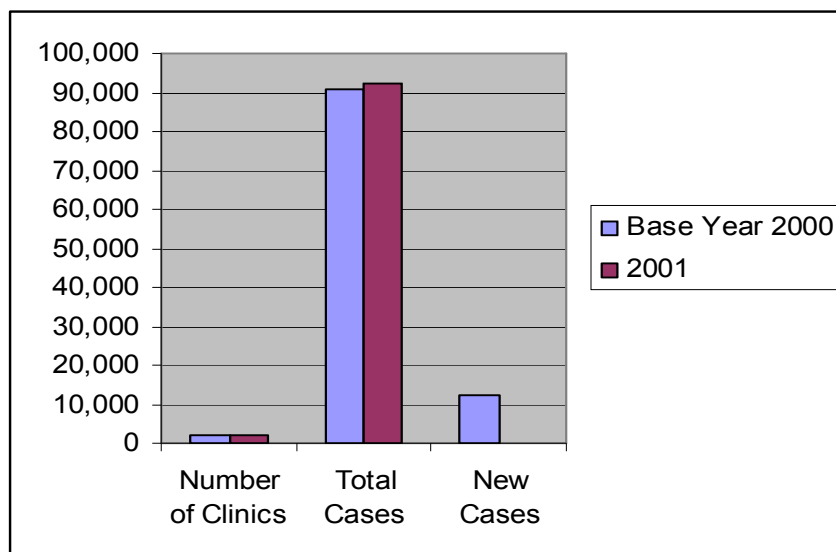
Source: MOH HMSR 2001

In 2001, 28.3% of all surgery done in public sector hospital facilities were done in the WRHA. Of the 10,108 surgical operations in the region, 2,865 (28.3%) were done in Westmoreland and 354 (3.5%) in Trelawny (Table 2.14).

2.4.2.3 Hospital Services – Outpatient Specialist Clinics

One thousand, nine hundred and sixty-eight (1,968) outpatient clinics were held in the WRHA in 2001(108 less than in 2000). An additional 1,421 clients were seen (92,172 in 2001). Of the total figure, 14,167 (15.3%) were new clients (Figure 2.3). (TABLE A3)

Figure 2.3 Utilization of Outpatient Specialist Clinics: WRHA 2000-2001



Source: MOH HMSR 2000-2001

Table 2.15 Utilization of Outpatient Specialist Clinics: Jamaica, WRHA and Parishes 2001

Outpatient Specialty Clinic	Jamaica	WRHA	PARISHES			
			Trewlany	St. James	Hanover	Westmoreland
- Number of Clinics	13,736	1,968	116	1,348	9	495
- Number of Cases						
- Total	468,870	92,172	1,325	75,905	156	15,596
- New	887,931	14,167	453	12,539	89	1,088

Source: MOH HMSR 2001

Thirteen thousand, seven hundred and thirty six outpatient clinics were held nationally in 2001. Approximately 14 percent of these clinics were held in the WRHA (1,968). In the region St. James held approximately 68.5% (1,348) of all outpatient clinics followed by Westmoreland with 25% (495). The bulk of the patients (75,095) were seen in St. James and expectedly, the largest number of new patients as well (12,539) (Table 2.15).

2.4.2.3 Diagnostic Services – Laboratory

Table 2.16 Utilization of Laboratory Services: WRHA 2000 - 2001

Variables	Base Year 2000	2001
- Total No. of Patients	106,521	515,460
- Examination/Test Total	386,753	515,354
- Cytology	2,899	229
- Haematology	140,710	162,579
- Chemistry	202,075	301,151
- Urinalysis	2,621	3,596
- Histology	2,269	1,989
- Microbiology		
- Serology	7,095	7,241
- Tuberculosis (TB)	-	752
- Others	418	11,223
- Immunology	11,357	4,787
- Blood Bank	15,578	20,852
- Others	1,731	1,011

Source: MOH, HMSR 2000-2001

In 2001, there was a large (408,939) increase in the number of patients utilizing laboratory services in the WRHA, when compared to the previous year. This was accompanied by a 33.3% increase in the number of examinations done (515,354). The largest percent increases were in chemistry (49.09%) and urinalysis (37.2%) (Table 2.16).

Table 2.17 Utilization of Laboratory Services: Jamaica, WRHA and Parishes 2001

VARIABLES	Jamaica	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
- Total No. of Clients	1,463,326	515,640	3,609	467,193	N O S E R V I C E	44,658
- Examination/Test Total	1,490,026	515,354	3,609	467,103		44,642
- Cytology	349	229	-	229		-
- Haematology	689,310	162,579	1,869	130,452		30,198
- Chemistry	696,298	301,151	26	289,013		12,116
- Urinalysis	14,851	3,596	22	2,948		626
- Histology	7,721	1,989	-	1,989		-
- Microbiology						
- Serology	15,668	7,241	1,600	5,641		-
- TB	882	752	-	752		-
- Others	13,961	11,223	-	11,106	117	
- Immunology	11,188	4,787	-	4,787	-	
- Blood Bank	37,629	20,852	92	19,178	1,582	
- Others	2,178	1,011	-	1,008	3	

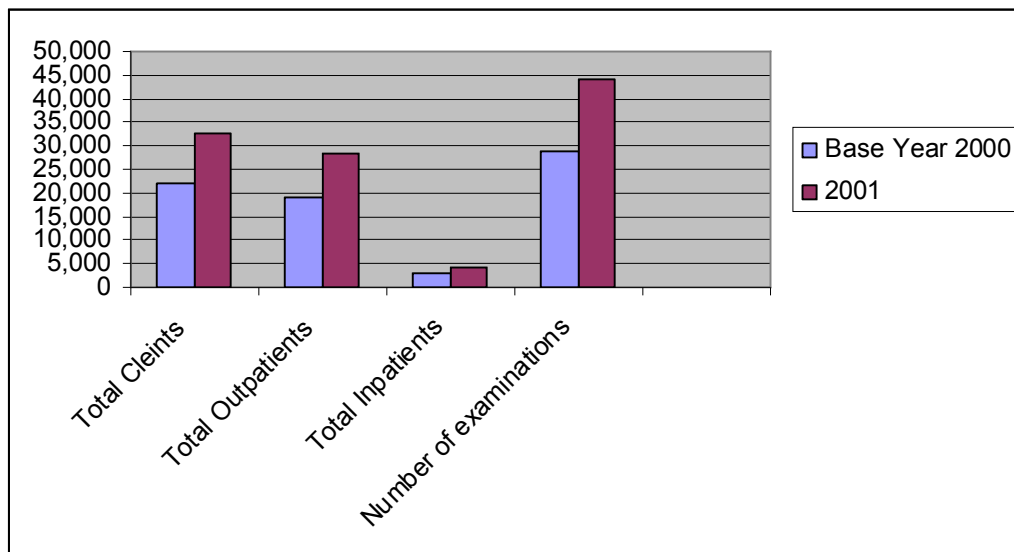
Source – MOH: HMSR 2001

Public laboratory services were offered at three sites in the WRHA (Trelawny, St. James and Westmoreland). Approximately 35% of all patients and laboratory examinations done in the public sector in 2001 resided in the WRHA. The largest number of examinations was for blood chemistry which represented 43.3% of the national figure (Table 2.17).

2.4.2.4 Diagnostic Services – Radiography

During year 2001, there were increases in the number of patients using radiography services generally (10,701) when compared to the base year. There was an increase (9,212) in the number of outpatients. Simultaneously, the number of examinations increased by (15,184) in 2001 (Figure 2.4). (TABLE A4)

Figure 2.4 Utilization of Radiography Services: WRHA 2000-2001



Source: MOH HMSR 2000-2001

**Table 2.18 Utilization of Radiography Services: Jamaica, WRHA and Parishes
2001**

Variables	Jamaica	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmore- land
- Number of Clients						
- Total	200,967	32,777	NO	25,010	NO	7,767
- Outpatients	155,925	28,381		22,066		6,315
- Inpatients	45,042	4,396	SERVICE	2,944	SERVICE	1,452
-Number of examinations	205,008	44,021		33,847		10,174

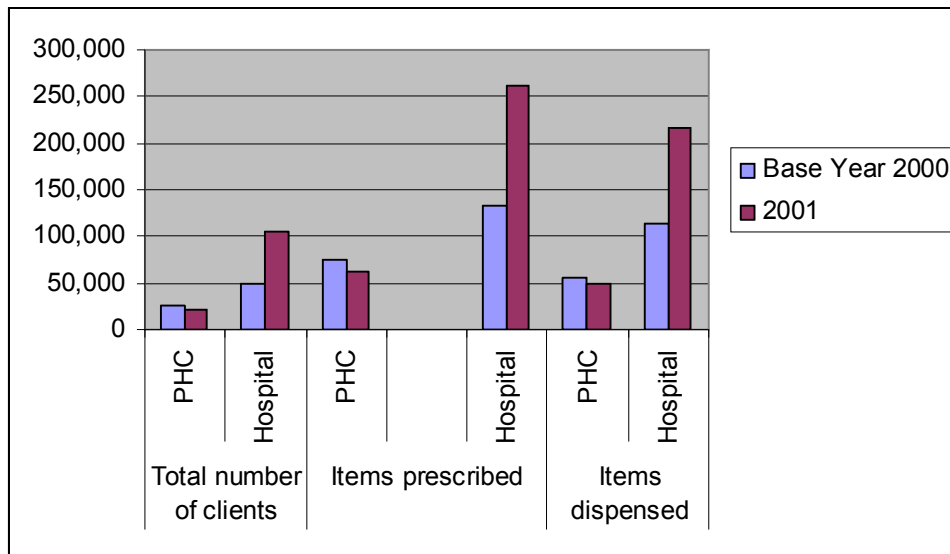
Source: MOH: HMSR 2001

In the WRHA, public radiography services were offered in all the parishes except Trelawny and Hanover. Approximately 7,767 clients accessed services in the parish of Westmoreland. The bulk of users were outpatients. The WRHA conducted 21.6% of all radiographic examinations in the public sector in 2001 (Table 2.18).

2.4.2.5 Therapeutic Services – Pharmaceutical

The 2001 data demonstrated a decline in the utilization of public pharmaceutical services at the primary health care level (3,433 clients) in the WRHA. The number of clients, the number of items prescribed and the number of items dispensed were all below the base year figures (Figure 2.5). There was a simultaneous increase in the utilization of public hospital pharmaceutical services above the base year with the number of clients increasing by 112. 26% (54,981); and the number of items dispensed by 91.4% (102,904) (Figure 2.5) (TABLE A5).

Figure 2.5 Utilization of Pharmacy Services: WRHA 2000-2001



Source: MOH, MCSR & HMSR 2000-2001

Table 2.19 Utilization of Pharmacy Services: Jamaica, WRHA and Parishes 2001

Variables	Location	Jamaica	WRHA	PARISHES			
				Trelawny	St. James	Hanover	Westmoreland
Pharmacy	PHC	156,854	21,603	14,131	7,240	-	232
- Total number of clients	Hospital	475,978	103,975	6,654	57,575	6,193	33,553
- Items prescribed	PHC	373,834	61,525	45,624	15,810	-	81
	Hospital	1,203,616	261,834	15,772	135,856	23,165	87,041
- Items dispensed	PHC	289,895	48,231	37,725	10,423	-	83
	Hospital	994,190	215,439	12,517	112,0051	17,742	73,129

Source: MOH, MCSR & HMSR 200

1- No data received

Just about 13.8% of the population using public pharmaceutical services at the primary health care level were in the WRHA. The parish of Trelawny demonstrated a 65.5% utilization of the services at the primary health care level in the entire region. Also the percentage of items prescribed represented 74.9% and the percentage dispensed 78.3% (Table 2.19).

On the other hand, approximately 19.8% of all patients using public pharmaceutical services were from WRHA. That group represented 20.5% of all items prescribed nationally. Twenty one point one percent (21.1%) of all items prescribed were dispensed (Table 2.19).

2.4.2.5 Therapeutic Services - Physiotherapy

Table 2.20 Utilization of Physiotherapy Services: WRHA 2000 – 2001

Physiotherapy	Base Year 2000	2001
- Total Patients	4,047	4,601
- Inpatients	1,390	1,614
- Outpatients	2,657	2,987
- Number of Treatments		
- Cardio-thoracic	250	20
- Orthopaedic	27,199	27,961
- Neurology	13,465	12,026
- Neurosurgery	189	266
- Medicine	5,912	7,247
- General Surgery	3,876	4,903
- Other	3,281	4,354

Source – MOH: HMSR 2000-2001

An additional 554 patients utilized the public physiotherapy services offered in the WRHA in 2001, when compared to the base year (4,047). Clients with orthopaedic conditions continued to be the largest users of the services (Table 2.20).

Table 2.21 Utilization of Physiotherapy Services: Jamaica, WRHA and Parishes 2001

Physiotherapy	Jamaica	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
- Total Patients	26,986	4,601	23	3,734		844
- Inpatients	10,568	1,614	21	1,427	N	166
- Outpatients	16,418	2,987	2	2,307	O	678
- Number of Treatments						
- Cardio-thoracic surgery	4,158	20		16	S	4
- Orthopaedic		27,961	48	24,780	E	3,133
- Neurology	37,961	12,026	45	8,720	R	3,261
- Neurosurgery	6,286	266		266	V	
- Medicine	24,667	7,247	10	7,096	I	141
- General Surgery	16,347	4,903	30	3,281	C	1,592
- Other	22,362	4,354	110	4,348	E	

Source – MOH: HMSR 2001

Approximately 17% of all public physiotherapy services were delivered by the WRHA in 2001 in the parishes of Trelawny, St. James and Westmoreland. For the WRHA, inpatient utilization represented 15.3% of the national inpatient utilization, while outpatients in WRHA represented 18.2% of the workload (Table 2.21).

2.4.2.5 Therapeutic Services – Radiation/Oncology

Table 2.22 Utilization of Radiation/Oncology Services: Jamaica and WRHA 2000-2001

Year		Treatment					
		Total	Cobalt	Chemotherapy	Superficial	Radium	Other
2000	Jamaica	39,315	35,788	621	2,472	93	34
	WRHA	3,398	2,905	201	49	9	234
2001	Jamaica	38,811	33,418	621	2,199	112	2,461
	WRHA	6,798	4,273	170	105	11	2,239

Source: MOH HMSR 2000-2001

There are two public radiation/oncology sites on the island – Kingston and Montego Bay at two major hospitals – Kingston Public and Cornwall Regional Hospitals. In 2001, nationally there was a decrease in the total number of treatments below that of the base year, WRHA demonstrated 100% increase in the total number of treatments over the same period Table (2.22).

3.0 TECHNICAL AFFAIRS

3.1 Health Status

3.2 Mortality

3.1 HEALTH STATUS

3.1.1 THE HEALTH INDICATORS

Table 3.1 Health Indicators: Jamaica 2000 – 2001

INDICATORS	2000	2001
- Life Expectancy	72	74
- Contraceptive Prevalence	N/A	66
- Total Fertility Rate (per 1,000 women 15 -49)	N/A	2.8
- Crude Birth Rate (per 1,000 mean population)	20.0	21.2
- Crude Death Rate (per 1,000 mean population)	5.1	6.6
- Infant Mortality Rate (per 1,000 live births)	24.5	24.5
- Maternal Mortality Ratio	111.0	106.2

Source: MOH Annual Reports 2000 – 2001

The Health status of Jamaica has been relatively good; attributable to the public and private provisions of health care and the subsequent utilization of the services by the members of the population. While life expectancy at birth was 74 in 2001, there is need to improve the health indicators relating to infant and maternal mortality (Table 3.1).

3.1.2 MORBIDITY PROFILE

Visits to Primary Health Care facilities and utilization of hospital inpatient services have been used as the basis of the morbidity profile.

3.1.2.1 PRIMARY HEALTH CARE

Table 3.2 Health Centre Visits by Diagnosis and Rank: Jamaica and WRHA 2001

DIAGNOSES	2001			
	Jamaica	Rank	WRHA	Rank
Diseases of the Circulatory System	166,640	1	28,361	1
- Hypertension	106,999		25,591	
- Other Cardiovascular Disease	9,941		2,770	
Diseases of the Respiratory System	114,209	2	13,495	4
- Upper Respiratory Tract Infection	86,676		9,931	
- Lower Respiratory Tract Infection	18,395		2,021	
- Asthma	9,138		1,543	
Diseases of the Genito-Urinary System and Gynaecological Conditions	105,125	3	18,245	2
- Urinary	14,354		1,998	
- STI (Except PID)	64,575		11,982	
- PID	7,120		1,042	
- Other Gynaecological Conditions	19,084		3,223	
Disease of the Skin	100,568	4	17,293	3
Diabetes & Hypertension	49,247	5	12,607	5
Diabetes	31,937		6,902	
- Leg Ulcers due to Diabetes	1,400		326	
Diseases of the Musculoskeletal	45,622	6	9,219	6
Diseases of the Digestive System	30,322	7	4,552	8
- Gastroenteritis	9,249		1,040	
- Other Gastro-intestinal Disorders	21,073		3,512	
Accidents & Injuries	29,157	8	6,898	7
- Intentional	3,391		862	
- Unintentional	25,766		6,037	
Psychiatry	25,870	9	6,176	9
Eye Disorders	11,946	10	2,115	10
Other Diagnoses	140,265		29,406	

Source: MOH, MCSR 2001

It must be noted that at the WRHA level, the five main causes of health centre visit were dissimilar to the national ranking except for Diseases of the Circulatory System (1) and (5) Diabetes and Hypertension. Diseases of the Genito-Urinary system and Gynaecological

conditions ranked (2), Disease of the Skin (3) and Diseases of the Respiratory System (4) thereby completing the rank order in 2001 (Table 3.2).

3.1.2.2 HOSPITAL INPATIENT SERVICES

Table 3.3 Ten Leading Causes of Discharge from Public Hospitals by Diagnosis and Rank: Jamaica and WRHA 2000 – 2001

DIAGNOSIS	Base Year 2000				2001			
	Jamaica		WRHA		Jamaica		WRHA	
Obstetric	67955	1	11656	1	51246	1	10682	1
Accident and Injuries	15330	2	2329	2	15373	2	2413	2
Diseases of the Respiratory System	11655	3	1466	5	10470	3	1481	5
Disease of the Circulatory System	9914	4	1634	3	9804	4	1811	3
Diseases of the Digestive System	8641	5	1463	4	8446	5	1568	4
Perinatal Conditions	6513	6	1025	7	5723	7	1015	8
Infectious and Parasitic Diseases	6171	7	948	9	4863	10	8632	10
Diseases of Genito-Urinary System	6154	8	1017	8	5934	6	1132	6
Neoplasm	5654	9	1037	6	5422	8	1107	7
Endocrine, Nutritional and Metabolic Diseases	5252	10	934	10	5074	9	983	9
Neuropsychiatric	4066	11	506	11	4128	11	419	11
Total Discharge	15537		25827		134705		25611	

Source: MOH Jamaica, Annual Report 2000-2001

The data indicated that the leading cause of discharge from all public hospitals in year 2000 was Obstetric Conditions. That aside, nationally, the five leading causes of discharge by diagnosis in the base year included Accident and Injuries, Diseases of the Respiratory System, Diseases of the Circulatory System, Diseases of the Digestive System and Perinatal Conditions. Other than the discharges for Accident and Injuries, the WRHA data did not mirror the national data. The changes resided in Diseases of the Circulatory System (3), Diseases of the Digestive System (4), Diseases of the Respiratory System (5) and Neoplasm (6) (Table 3.3).

Similarly in 2001, WRHA public hospital discharges by diagnosis differed from the national trend. Accident and Injuries (2,413), Diseases of the Circulatory System (1,811), Diseases of the Digestive System (1,568), Diseases of the Respiratory System (1,481). Diseases of the Genito-Urinary System (1,132) completed the list of five leading causes of hospital discharge (Table 3.3).

3.1.3 NATIONAL HEALTH PRIORITIES

The National Health Priorities address those factors/diagnoses that could impinge on and or have a negative impact on population health and national development. Several variables were used to arrive at the listing, and include demographic, environmental, epidemiologic and sociological concerns.

Among the health priorities are:

- Environmental Health
- Communicable Disease Control
- Chronic Non-Communicable Diseases
- Child and Adolescent Health
- Reproductive Health
- Mental Health and Substance Abuse
- Emergency Health Services

3.1.3.1 ENVIRONMENTAL HEALTH

Environmental Health focuses on the monitoring of those activities that could have a deleterious effect on health status.

Table 3.4 Food Safety: WRHA Parishes 2001

VARIABLES	WRHA Parishes			
	Trelawny	St. James	Hanover	Westmoreland
Food Handlers Attending Clinics	2548	*	2834	4913
New Cards / Permits Issued	1077	*	*	1282
Food Handling Establishments	3193	1208	395	343
Percentage Satisfactory	*	*	*	*
MEAT INSPECTION				
Meat and Poultry (Kgs)	63,563	*	9058	3,337
Percentage Meeting National Standard	*	99%	99%	98.5%
% Milk Meeting National Standard	*	*	*	*
No. of Hotels Inspections	29	*	*	28
No. Certified Satisfactory	4	*	*	59

Source: WRHA Parish Reports 2001

* DNA

During year 2001, 5139 food handling establishments were inspected (Table 3.4). Approximately 99% of all meats inspected in the parishes of St. James, Hanover and Westmoreland met national standards (Table 3.4).

Table 3.5 Water Quality: WRHA Parishes 2001

VARIABLES	WRHA Parishes			
	Trelawny	St. James	Hanover	Westmoreland
DRINKING WATER				
No. of Supplies Sampled	*	*	*	*
% of Population Access to Treated	*	*	*	*
Supplies	77	81.8	75	74.1
WASTE WATER				
No. of Plants Inspected	*	*	*	*
% Satisfactory	66	78	57.1	80
OTHER WATER				
No. of Swimming Pools Inspected	6	68	*	80
Percentage Satisfactory	66	63.2	18.8	21.3
No. of Recreational Water Inspected	*	*	*	*
% Satisfactory	*	*	*	*

Source: WRHA Parish Reports 2001

* DNA

On an average, 77 of WRHA's population had access to treated water. The data revealed that 70.25% of waste water plants were satisfactory. (Table 3.5)

Table 3.6 Sanitation: WRHA Parishes 2001

Indicators	WRHA Parishes			
	Trelawny	St. James	Hanover	Westmoreland
Household Sanitation				
Household Inspection	3789			25,261
% Household Satisfactory	71	77		
Complaints Received	301	965		1001
% Complaints Investigated	83	100	86	84.1
Notices - Served	121			151
% Notices - Obeyed	19.0		50.0	80.8
- Prosecutions	9	2		
Institutions				
Schools Inspected	60	80	85	
% School Satisfactory	53.3		79	29.2
Children's Homes Inspections				
% Children's Homes Satisfactory				
Places of Safety Inspections		8		
% Places of Safety Satisfactory		1		
Lock-up Inspections		19		
% Lock-up Satisfactory		14		
Hospitals Inspections		16		
% Hospitals Satisfactory		12		
Nursing Homes Inspections		10		
% Nursing Home Satisfactory		3		
Excreta Disposal - Inspections				
% Satisfactory	70	77	72	70
SOLID WASTE				
No. of Disposal Sites Inspected				
% Satisfactory				

Source WRHA Parish reports 2001

Good sanitation is extremely important in the prevention of illness and the maintenance of health. The WRHA environmental health services engaged in inspection activities to ensure that there were no sanitation – related outbreaks of illness (Table 3.6).

Table 3.7 Vector Control: WRHA Parishes 2001

VARIABLES	WRHA Parishes			
	Trelawny	St. James	Hanover	Westmoreland
Vector Control – Indices	*	3.9	11.3	15.5
Barrier Zone (%)	*	1.75	*	*

Source: WRHA Parish Report 2001 *DNA

In order to ensure that there were no indigenous cases of vector born illness in the region; the vector indices are constantly monitored. (Table 3.7)

Table 3.8 Approvals for Development / Commercial Activities: WRHA Parishes 2001

VARIABLES	WRGHA Parishes			
	Trelawny	St. James	Hanover	Westmoreland
No. of Applications Building /	108	*	*	249
No. of Approvals Building /	95	*	*	227
No. of Applications Quarry	*	*	*	*
No. of Approvals Quarry License	*	*	*	*
No. of Applications -Dairies	*	*	*	1
No. of Approvals Dairies	*	*	*	*
No. of Application Butchers	*	*	*	95
No. of Approvals Butchers	*	*	*	67
No. of Application	*	*	*	394
No. of Approvals	*	*	*	192
No. of Applications Barber /	22	*	*	1
No. of Approvals	22	*	*	19

Source WRHHA Parish reports – Trelawny, St. James, Hanover, Westmoreland

Environmental Health Services participate in specific national development activities through an approval process which gives cognisance to the impact of these activities on human health. (Table 3.8)

3.1.3.2 CONTROL OF COMMUNICABLE DISEASES

Immunization Coverage

Table 3.9 Trends in Immunization Coverage for Vaccine Preventable Diseases: Jamaica and WRHA 2000 – 2001

VACCINES	% COVERAGE			
	Base Year 2000		2001	
	JA	WRHA	JA	WRHA
- BCG	94.1	94.2	96.9	98.8
- Polio	89.5	92.3	94.3	100
- DPT/DT	89.9	92.7	95.8	98.3
- Hepatitis B	1.7	0.7	2.5	0
- MMR	88.1	86.6	84.6	85.2
- Hib	2.3	.5	5.0	0.1

Source: Ministry of Health EPI Report 2000 – 2001

In the Control of communicable diseases, immunization against the vaccine preventable diseases is a very important strategy. In 2001, immunization coverage for the major vaccine preventable diseases (except MMR) demonstrated increases when compared to base year 2000. WRHA's figures were above those of the national level (Table 3.9).

Notifiable Diseases

The WRHA, like other regions carries out surveillance activities for selected diseases using sentinel and hospital active sites from which weekly reports are forwarded in order to control Communicable Diseases. Other relevant strategies are also utilized.

Table 3.10 Notifiable and Other Disease of National Interest: WRHA and Parishes 2001

NOTIFIABLE DISEASES	WRHA	PARISHES			
		Trelawny	St. James	Hanover	Westmoreland
Acute Flaccid Paralysis	-	-	-	-	-
HIV/AIDS	296	48	204	44	48
HIV Positive				44	
Malaria (Imported)	1			-	
Dengue				-	-
Measles Confirmed				-	-
Meningitis – H-Influenzae	92		64	-	28
- Meningococcal			1	-	
Tetanus (Excluding Neonatal)	6		2	3	1
Typhoid				-	1
Tuberculosis (Confirmed)	35		30	4	1
Hansen’s Disease	4		3	-	1
Hepatitis - B	10	2		1	7
- Viral				-	-
- A				-	-
Ophthalmia Neonatorum	25		4		21
Congenital Syphilis	5			2	3
Syphilis (All Stage)	12			12	-
Genital Ulcer Syndrome	58			25	33
Urethral Discharge Syndrome	909			139	770
Vaginal Discharge Syndrome	274			274	
OTHER DISEASES					
Accidental Poisoning	45		8	-	37
Febrile Illness				-	-
Food Borne Illness	38			-	38

Gastroenteritis	2,027		1,757	270	-
Conjunctivitis				-	-
Tinea				-	-
Scabies				-	211

Source: Parish Reports – Trelawny, St. James, Hanover, Westmoreland 2001

Of the 296 new cases of AIDS in the WRHA, 69% (204) were in St. James (Table 3.10).

There were no indigenous cases of malaria in the WRHA. However, there was one (1) imported case (Table 3.10).

The thirty-five confirmed cases of Tuberculosis were in the parishes of St. James (30), Hanover (4) and Westmoreland (1) (Table 3.10).

New cases of Hansen’s Disease continues to be reported in St. James (3 and Westmoreland (Table 3.10)

3.1.3.3 CHRONIC NON-COMMUNICABLE DISEASES

Asthma

Table 3.11 Morbidity Profile – Asthma: Jamaica and WRHA 2000-2001

VARIABLES	2000		2001	
	JA	WRHA	JA	WRHA
PHC Visits	10,512	*	9,138	1,543
Cases seen at A&E	40,237	6,364	39,415	6,119
Nebulization in A&E	119,971	35,383	118,959	34,210
Discharge	2,460	*	2,127	*
Outpatient Specialty Clinic (Paediatric)				
- Total Cases	521	138	563	63
- New Cases	182	26	68	-

Source MOH: MCSR, HMSR, MOH Jamaica Annual Report 2000 – 2001

*DNA

In 2001, while 1,543 visits were made to PHC facilities for Asthma, at the WRHA level, there were 822, (2%) less visits nationally than in year 2000. A&E cases declined by 245 (3.8%) and Nebulization by 1,173(3.3%) at WRHA in 2001. There were 42 more cases seen in paediatric outpatient clinic nationally, but 75 cases less at the WRHA level. New cases decreased by 17% (14) (Table 3.11).

Cancer

Table 3.12 Morbidity Profile – Cancer: Jamaica and WRHA 2000-2001

VARIABLES	2000		2001	
	JA	WRHA	JA	WRHA
- No. Screened in PHC				
- Breast	58,483	*	73,809	10,811
- Cervix	23,858	*	22,351	4,353
- Prostate	657	*	1,140	185
- No. Referred for Abnormal Smears	2,500	*	2,598	340
- < 25	735	*	808	119
- < 25 – 54	1,632	*	1,653	214
- 55 and over	133	*	137	7
- Treatments at KPH & CRH	39,315	3,398	38,811	6,793
- Chemotherapy	621	201	621	170
- Cobalt	35,788	2,905	33,418	4,273
- Superficial	2,472	49	2,199	105
- Radium	93	9	112	11
- Other	341	234	2,461	2,239
Radiotherapy Outpatient Clinic – Total Cases	8,100	706	9,428	3,368
New Cases	2,183		802	

Source: MOH MCSR, HMSR, MOH Jamaica Annual Reports 2000-2001 *DNA

In 2001, there was an increase in screening for breast cancer, above year 2000. While screening for cervical cancer declined by 1507, screening for prostate cancer increased by 483. At the WRHA level, 10,811 clients were screened for breast cancer; 4,653 for cervical cancer and 185 for prostate cancer. Nationally, referral for abnormal cervical smears in 2001 was highest among the 25 – 54 age group with a 1.2% (1653), followed by the < 25 age group which increased by 9.0% (73) and the 55 and over an increase of 4.0 at the WRHA level . There were 340 abnormal smears in 2001, reflecting 63% (214) among the 25 - 54 year olds, 35% (119) among the < 25 year old and 2% (17) among the 55 and over age group (Table 3.12).

Treatments for cancer totalled 38,811 in 2001 a decrease of 1.2% (504) when compared to year 2000. WRHA on the other hand registered a 50% increase in treatments. Cobalt, the most frequently administered treatment declined by 2,370 (6.6%) when examined against year 2000 figures. While 8,100 cases were seen in outpatient radiology clinics in year 2000, year 2001 saw an increase of 14% (1,328) cases. At the WRHA level, there was more than a fourfold increase from 706 to 3,368. There were no new cases seen at WRHA level in either year 2000 or 2001. However, at the national level there was a 271% (1,381) decline in the numbers of new cases when compared to year 2000 (Table 3.12).

Diseases of the Circulatory System

Table 3.13 Morbidity Profile – Diseases of the Circulatory System: Jamaica and WRHA 2000-2001

VARIABLES	2000		2001	
	JA	WRHA	JA	WRHA
PHC Visit				
- Hypertension	10,6601	25,816	106,699	25,591
- Other C.V Disease	8,969	2,672	9,941	2,770
-Chronic Rheumatic Diseases	3,959	1,043	4,221	1,100
Visits to PHC as a % Discharge of Total Hospital Discharge				
- Hypertension	1.9	*	2.1	*
- Other C.V Disease	1.5	*	1.6	*
- Heart Disease	2	*	2.1	*
-Chronic Rheumatic Disease	0.1	*	0.1	*
Stroke	1.2	*	1.3	*

Source: MOH MCSR, 2001; MOH Jamaica Annual Report 2000-2001

*DNA

In 2001, while just about 98 additional visits were made to PHC facilities for Hypertension, there was an increase 972 (9.8%) visits for Other Cardiovascular Disease (CVD) and 262 (6.6%) for chronic Rheumatic Heart Disease at the national level. WRHA recorded decrease in visits for Hypertension (0.8 %(225) and increases in visits for Other Cardiovascular Disease (3.5%(98) and chronic Rheumatic Heart Disease (57(5.1%) (Table 3.13).

Diabetes

Table 3.14 Morbidity Profile – Diabetes: Jamaica & WRHA 2000-2001

VARIABLES	2000		2001	
	JA	WRHA	JA	WRHA
- Visits to PHC	32,563	7,163	31,937	6,902
- Discharge	2.5	*	2.8	*
- Leg Ulcer due to diabetes	1,937	*	1,400	326
- Amputation due to diabetes	109	*	113	*

Source: MOH MCSR, HMSR MOH Jamaica: Annual Report 2000 – 2001

*DNA

The year 2001 recorded declines in visits to primary health care facilities for diabetes care at the national (2%(626) and WRHA levels (3.6% (261). Similarly there were less (537) ulcers due to diabetes at the national level while there were 326 clients at WRHA in 2001. While WRHA discharge rates and amputation due to diabetes are not available, the national figures increased by 0.3% and 4% respectively (Table 3.14).

Other Monitored Diseases

**Table 3.15 Morbidity Profile – Other Monitored Diseases: Jamaica and WRHA
2000 – 2001**

YEAR	VARIABLES	OTHER MONITORED DISEASES									
		RTI Excluding Asthma		Skin Disease		Musculoskeletal Disease		Other GI Disorders		Diabetes & Hypertension	
		JA	WRHA	JA	WRHA	JA	WRHA	JA	WRHA	JA	WRHA
2000	Visits to PHC	116,900	*	101,806	*	46,322	*	20,926	*	45,514	11,430
	% Discharge of Total Discharge	*	*	*	*	*	*	*	*	*	*
2001	Visits to PHC	105,071	11,952	100,568	17,293	45,672	9,216	21,073	3,512	49,247	12,607
	% Discharge of Total Discharge	7.3	*	2.2	*	1.1	*	1.6	*	3.2	*

Source MOH MCSR; HMSR; MOH Jamaica Annual Report 2000 - 2001

* DNA

In year 2001, the national PHC visits – Respiratory Tract Infection excluding Asthma (105,071), Skin Diseases (100,568) and Diabetes and Hypertension (49,247) were the leading cause of PHC visits among the group Other Monitored Diseases. At the WRHA level, the major conditions influencing PHC visit were different – Skin Disease (17,293), Diabetes and Hypertension (12,607) and Respiratory Tract Infection excluding Asthma (11,952) (Table 3.15).

3.1.3.4 CHILD AND ADOLESCENT HEALTH

Child Health Profile

**Table 3.16 Status of Child Health – Several Variables: Jamaica and WRHA
2000 – 2001**

VARIABLES	Base Year 2000		2001	
	Jamaica	WRHA	Jamaica	WRHA
No. of Live Births - Community	1,727	494	1,493	378
- Hospital	46,797	8,874	44,359	8,593
No. of Still Births - Community	21	3	13	2
- Hospital	878	160	850	144
Low Birth Weight - Community	136	43	97	28
- Hospital	4,299	1,038	4,061	992
Exclusive Breastfeeding - 6 weeks	10,064	2,505	18,591	4,781
- 12 weeks	*	*	11,770	3,348
Immunization Coverage (<1)	93.6	94.0	96.4	98.6
BCG	86.1	90.6	91.0	98.1
Polio	86.4	91.1	90.4	96.0
DPT+.DT	1.5	0.3	2.8	0.1
HIB	0.9	0.4	1.3	*
Hepatitis B	88.1	86.6	84.6	85.2
MMR (12 – 23mths)				
Nutrition Status - Above Normal	17,195	3,953	16,220	3,836
- Normal	207,215	44,771	212,419	48,414
- Moderate	9,523	1,616	8,994	1,485
- Below Normal	311	68	275	39
% Receiving Home Visits	46.8	41.4	48.6	44.0
Child Health Clinic Visits	*	*	309,700	68,943
Child Guidance Cases - Total	798	309	922	375
- New	165	*	287	140
Total Accident & Emergency Cases	*	*	114,233	22,775

Source: MCSR & HMSR 2000-2001

*DNA

In year 2001 there was a decline in the number of live births at the hospital (2,438) and publicly monitored community (234) levels when compared to year 2000. A similar pattern existed at the WRHA level – 281 and 116 respectively (Table 3.16).

In 2001, nine point one percent (9.1%) of all babies delivered in public facilities and communities weighed less than 2.5kg. At the WRHA level, the figure was 11.4% (Table 3.16).

Over the 2001 period, there were 30,361 exclusively breastfed babies visiting public facilities on the island, with 8,129 being in the WRHA. When the data was disaggregated for six and twelve weeks, it revealed that at twelve weeks there was a national decline of 36.7% (6,821) and at the WRHA level 30% (1,433) (Table 3.16).

In 2001, except for Haemophilus Influenzae (Hib) and Hepatitis B, national immunization coverage for standard vaccine preventable diseases stood at 90.6%. The WRHA maintained above national level coverage in all the standard ones. (Table 3.16)

There were 212,419 children age 0-35 months designated normal nutritional status in public child health clinics in 2001, a 2.5% increase when compared to year 2000. Twenty two point eight percent (22.8%) (48,414) of these children were in WRHA where the increase was 7.5% (Table 4.12). While there were 16,220 children who had above normal nutritional status nationally, at WRHA it was 23.6 (3,836). Within the 0-35 months age group attending public clinics, two hundred and seventy five (275) children nationally and 39 (WRHA) were below normal. Of importance were the 1,495 children in WRHA (8,994 nationally) in the group with moderate nutritional status (Table 3.16).

Forty-eight point six percent (48.6%) of all home visits were made nationally to children using public facilities. At the WRHA, home visits to children represented 44% (Table 3.16).

In 2001, 309,700 visits were made to public child welfare clinics. Of this figure, 22.3% (68,943) were made at the WRHA level (Table 3.16).

Of a total of 922 cases seen in child guidance clinics nationally and in 2001, 287 were from WRHA. While 40.7% of all cases seen nationally were new, new cases in the WRHA represented 48.8% (Table 3.16).

Year 2001 recorded utilization of public Accident and Emergency Services by 114,233 children nationally, WRHA, represented 15.8% (22,775) of these cases (Table 3.16).

Child Morbidity Profile

**Table 3.17 Provision and Utilization of Hospital Services (Children):
Jamaica and WRHA 2001**

Variables	2001	
	Jamaica	WRHA
Bed Complement	655	86
Bed Occupancy	71.6	86.3
Average Length of Stay	5.7	6.2
Outpatient Cases - Total	56408	5376
- New	9892	506

Source: MOH HMSR 2001

Thirteen percent (13%) of all public paediatric beds on the island were in the WRHA in 2001. At 86.33% the bed occupancy rate was higher than the national level and so was the average length of stay 6.2 days compared to 5.7 days. While 17.5 % (9892) of all outpatients clinic cases seen at the national level were new, 9.4% (506) new cases were seen at the WRHA level (Table 3.17).

Child Morbidity

Twenty-seven thousand, six hundred and ninety-five males (27,695) and 27,408 females accounted for the 54,743 persons in the under one group in 2001. There were 11,229 discharges from public hospitals among this age group. Leading causes of discharge per 10,000 population included Perinatal Conditions (1066.8);, Diseases of

the Respiratory System (9356.0); Infectious and Parasitic Diseases (194.9); Accidents and Injuries (78.9) and Congenital Malformation (60.4) (MOH Jamaica, Annual Report 2005).

The Population of the one to four age group consisted of 216,993 persons with leading illnesses of Diseases of the Respiratory System (143.4), Accidents and Injuries (83.8), and Infectious and Parasitic Diseases (52.3) necessitating discharges from public hospitals. Discharge rates are calculated per 10,000 population (MOH Jamaica, Annual Report 2005).

There were 5,523 discharges from public hospital among the 279,323 children in the 5 - 9 age group in 2001. Based on rates of 10,000 per population, the leading causes of discharge included Accidents and Injuries (49.8), Diseases of the Respiratory system (44.6) (MOH Jamaica Annual Report 2005).

CHILD MORTALITY

Table 3.18 Under One Child Mortality: Jamaica and WRHA 2000-2001

Mortality	2000		2001	
	Jamaica	WRHA	Jamaica	WRHA
Perinatal Mortality Rate / 1000	29.7	25.8	31.0	27.9
Early Neonatal Mortality Rate/1000	11.5	8.2	12.4	11.6
Foetal Death Rate/1000	18.4	17.7	18.8	16.5
Infant Death Rate	19.9	*	19.9	*

Source: HMSR 2000-2001

The data revealed that when compared to 2000, all areas of under one child mortality rates increased marginally (1.3, 0.9, 0.4 per 1000) at the national level in 2001. At the WRHA, there was a 1.2% decrease in foetal death rate while Perinatal (2.1%) and Early Neonatal (3.4%) showed increases in the rate per 1000 (Table 3.18).

Adolescent Health

**Table 3.19 Status of Adolescent Health – Several Variables:
Jamaica and WRHA 2001**

Variables	2001	
	Jamaica	WRHA
Rheumatic Fever		
- No. with Rheumatic Heart Disease	4,221	1,100
- No. receiving Prophylaxis	10,400	2,513
Reproductive Health		
- Total Antenatal Visits	37,501	7,391
- 0 – 15 Weeks	2,307	502
- 16 – 28 weeks	5,769	1,093
- 29 weeks and over	993	175
No. with Hb<10gms/dl	1,035	201
- No. Treated	568	145
- No. SC/SS	172	17
No. Syphilis Positive	81	24
-No. Treated	32	7
Hospital Births % of Total Birth		
C-section Rate/100 deliveries		
% Postnatal Coverage	21.9	21.9
Postnatal Family Planning Acceptors	5,984	1,303
Contraceptive Accepted		
- Pill	2,365	590
- Injection	2,446	441
- IUD	22	3
- Condom	1,149	269
- Dual Method	2,672	428

Source: MOH MCSR 2001

Based on public health sector data, there were 4,221 adolescent cases of Rheumatic Heart Diseases (1,100 in WRHA) at the primary health care level in 2001. At that level,
Prepared by: Margaret E. Lewis, MSc

WRHA delivered 2,513 (24.1%) of all prophylactic treatment which totaled 10,400 (Table 3.19).

In 2001, adolescent made 7,311 visits to WRHA antenatal clinics. While 9,069 first visits were made nationally among this group, 1,770 such visits were in the WRHA. These visits were at 0 – 15 weeks (502) 16 -28 weeks (1,093) and 29 and over weeks (175) (Table 3.19).

Among the 1,035 pregnant adolescents with haemoglobin levels below 10gm/dl attending public antenatal clinic nationally, 201 were in the Western Region. While the region was able to treat 72.1% (145), at the national level only 54.9% (568) were treated. There were 172 and 17 cases of SS disease attending public antennal clinics in Jamaica and WRHA respectively (Table 3.19).

There were 81 and 24 adolescent cases of syphilis among antenatal clinic attendees' in Jamaica and WRHA respectively in 2001. Thirty two (39.5%) and seven (29.1%) cases were treated nationally and in WRHA respectively (Table 3.19).

Approximately 21.9% of all adolescents attended public postnatal clinics nationally and at the WRHA. Nationally, 5,984 accepted a family planning method while regionally (WRHA), it was 1,303 adolescents. While the dual method (2,672), injection (2,446) and the pill (2,365) were the major choices at the national level; the major regional choices among this group were the pill (590), injection (441) and dual method (426) (Table 3.19).

Adolescent Morbidity

In 2001, there were 244,470 males and 253,439 females in the 10 – 19 age group in the Jamaican population. There were discharges from public hospitals among the group mainly for Obstetric Conditions (59.1%), Accidents and Injuries, (14.1%) and Diseases of the Digestive System (4.3%) (MOH Jamaica, Annual Report 2001).

3.1.3.4 REPRODUCTIVE HEALTH

Table 3.20 Status of Reproductive Health – Several Variables: Jamaica and WRHA 2000-2001

SEVERAL VARIABLES	2000		2001	
	JA	WRHA	JA	WRHA
Contraceptive Prevalence	*	*	66	*
Total Fertility Rate per 1000 woman in 15 – 49 age group	*	*	2.8	*
Maternal Mortality Rate	111.0	*	106.2	*
Total Antenatal (ANC)Visits	164,189	33,973	147,876	30,080
% Anaemia (Hb < 10gms/dc)	14.7	*	13.1	16.1
% Treated	*	*	54.0	72.6
No. S.C/SS	*	*	599	60
% Syphilis Positive	1.8		1.7	3.2
% Treated	51.9		52.0	45.9
No. HIV Positive	*	*	*	*
Eclampsia	*	*	1,160	167
Antepartum Haemorrhage	150	23	178	33
Postpartum Haemorrhage	848	287	833	298
Mothers Delivered	44,424	8,921	45,281	9,021
Deliveries by Trained Persons	*	*	45,205	8,243
C-Section	10.2	*	11.1	*
Home Visits	*	*	32,211	5,622
Postnatal Visits (Mothers)	41,247	*	38,752	8,505
Postnatal Family Planning Acceptors	28,136	5,546	26,011	5,499
Contraceptive Acceptors				
- Pill	*	*	8,856	2,059
- Injection	*	*	10,382	1,871
- IUD	*	*	80	11
- Condom	3,103	1,545	6,691	1,558
- Dual Method	10,716	1,584	10,281	1,596
Tubal Litigation (Hospital)	2,888	672	3,065	583
Sterilization				
Hospital – Male	16	*	12	*
- Female	1,070	*	786	*
Health Centre – Male	18	*	6	*
- Female	42	*	135	*

Source: MOH MCSR, HMSR, MOH Jamaica Annual Report 2000-2001

*DNA

In year 2001, the Contraceptive Prevalence Rate was 66 and the Total Fertility rate per 1000 woman in the 15 – 49 years, 2.8. (Table 3.20)

While just about 3% of all public Antenatal visits were made to WRHA facilities; the bulk of first visits were made in the 16- 28 week period of pregnancy (3893 in WRHA) (Table 3.20)

Nationally, thirteen point one percent (13.1 %) of public Antenatal Clients had haemoglobin levels below 10gms per dcl in 2001. The figure was sixteen point one (16.1%) at WRHA. Fifty four percent (54%) and 72.6% were treated at the national and WRHA respectively. There were 60 antenatal women with SS Diseases at the WRHA level. (Table 3.20)

In 2001, 1.7% of all public antenatal clinic attenders were syphilis positive while it was 3.2% at WRHA. Among those infected 52% were treated nationally and 45.9% at the regional level. (Table 3.20)

Nationally 1,160 antenatal clients had Eclampsia and 167 at WRHA level. At the national level one hundred and seventy eight pregnant women experienced ante-partum haemorrhage (33 at WRHA) and 833 had post partum haemorrhage. The WRHA figure for postpartum haemorrhage was 298 - 35.7% of the national figure. (Table 3.20)

In 2001, just about 45,281 women delivered babies in public sector facilities in Jamaica – 9,021 in WRHA. Approximately 99.8% and 91.4% were delivered by trained persons nationally and at WRHA respectively. Nationally, the C-section rate was 11.1 (Table 3.20)

Approximately 21.9% (8,505) of all postnatal visits were made in WRHA and 5,622 home visits were made to mothers (Table 3.20)

In 2001, 26,011 and 5,499 women nationally and WRHA level respectively accepted a contraceptive method at postnatal clinic. (Table 3.20)

Choice of long term methods of contraceptive such as IUD was very low on the list of selected methods - 80 nationally and 11 at WRHA. While in order of choice, the injection (10,382), Dual method (10,281) and the Pill (8,856) were selected nationally;

the Pill (2,059), Injection (1,871) and Dual Method (1,596) were the rank order of choice in the WRHA (Table 3.20)

Three thousand and sixty-five (3065) Tubal ligations were done nationally and 583 at the regional level. Of the 939 sterilization done nationally, 798(85%) were done in hospitals and 15% (141) in health centers. Eighteen males (22%) were among the total number of sterilization. (Table 3.20).

Table 3.21 Provision and Utilization of Hospital Services – Reproductive Health: Jamaica and WRHA 2000-2001

OBSTETRIC SERVICES	2000		2001	
	JA	WRHA	JA	WRHA
Bed Complement	604	83	602	86
Bed Occupancy (%)	79.3	131.6	85.6	123.1
Average Length of Stay	2.4	2.6	2.6	2.7
Hospital Discharges				
- Obstetric	67,955	11,656	51,246	10,682
- Genitourinary System	6,154	1,017	5,934	1,132
Outpatient Clinic Cases				
- Obstetric - Total	64,617	12,413	65,831	13,395
- New	13,968	1,788	14,529	2,160
Gynaecology - Total	27,678	4,893	27,832	5,077
- New	4,556	707	4,850	805
Urology - Total	15,117	2,719	15,301	3,114
- New	2,235	491	2,576	699

Source: MOH MCSR, HMSR, MOH Jamaica Annual Reports 2000-2001

*DNA

In 2001, examination of public provision and utilization of services for reproductive health in WRHA revealed that of the 602 beds assigned for obstetric use nationally, WRHA had 14.2% (86), up from 83 in 2000. At 123.1%, WRHA bed occupancy rate was above the national levels 85.6, probably due to the frequency with which each bed was used. At 2.7 days, average length of stay was slightly above the national level of 2.6 (Table 3.21).

Hospital Discharge for Obstetric Conditions totalled 51,246 nationally in 2001, a decline of 24.5% when examined against year 2000 figures. At WRHA, there was a decline of 8.3% in the number of discharges (10,682).

There were 5,934 discharges for disorders of the genitourinary system in 2001 a decline of 220 cases when compared to year 2000. At WRHA however, while 1,017 cases were discharged in 2000, there was a 10.1% increase in discharges in 2001 (Table 3.21).

Outpatient clinic cases totalled 65,831 nationally and 13,395 for WRHA for obstetric conditions 2001. New cases increased nationally by 561 and regionally by 372. WRHA had 18.3% outpatient cases of all gynaecological conditions seen in public outpatient facilities. The total new cases seen at WRHA was 805 an increase of 12.1% (Table 3.21).

Fifteen thousand three hundred and one (15,301) outpatient clinic cases for urological conditions were seen nationally in 2001 – 3,114 (20%) in WRHA. Of all the cases seen, new cases represented 16.8% nationally and 22.4% at WRHA (Table 3.21).

**Table 3.22 Morbidity Profile – Reproductive Health: Jamaica and WRHA
2000-2001**

	2000		2001	
	JA	WRHA	JA	WRHA
PHC Visits for:				
Diseases of the Genitourinary System & Gynaecological Conditions :- Total	*	*	105,125	18,245
Other Gynaecological Conditions	*	*	19,084	3,223
- STI (Except PID)	*	*	64,575	11,982
- PID	*	*	7,120	1,042
- Urinary	*	*	14,354	1,998
Accident & Emergency Cases				
- Ob/Gynaecology	23,027	7,468	25,044	9,011
- GU	15,257	2,683	15,398	3,000
Surgical Interventions				
- Obstetric: Total	8,221	2,404	7,203	2,091
Emergency	4,055	1,350	3,857	1,092
Elective	4,002	1,054	3,318	999
- Other Gynaecological				
Total	6,381	589	5,120	717
Emergency	1,855	136	1,662	164
Elective	3,653	453	3,458	553
Urology Total	1,836	176	1,187	191
Emergency	140	15	147	9
Elective	985	161	1,040	182

Source: MOH Jamaica Annual Report 2000-2001

Nationally, visits to primary health care facilities for diseases of the Genitourinary system and Gynaecological conditions totalled 105,125 in 2001. WRHA had 18,245 visits. Based on rank, the conditions included STI (except PID) (11,982); Other Gynaecological conditions 3,223; Urinary (1,998) and PID (1,042) at WRHA, the ranking being similar to the national level except for magnitude (Table 3.22)

In 2001 Public Accident and Emergency services managed 25,044 cases of obstetric/gynaecological conditions nationally, (up from 23027 cases. WRHA increased its 2000 figure (7468) by approximately 17%. Nationally, genitourinary cases increased by 141 and by 10.5% (317) at WRHA. (Table 3.22)

Surgical interventions for obstetric conditions totalled 2,091 at WRHA with 52% representing emergency cases. There was more demand for elective among other gynaecological interventions which recorded 3,458 cases nationally and 553 at WRHA in 2001. (Table 3.22)

Interventions for urological conditions declined by 35% nationally but increased by 7.8% at WRHA in 2001. Most cases were done as electives. (Table 3.22)

3.1.3.6 MENTAL HEALTH

Table 3.23 Status of Mental Health – Several Variables: Jamaica and WRHA 2000-2001

VARIABLES	Base Year 2000		2001	
	Jamaica	WRHA	Jamaica	WRHA
Total Visits to PHC	*	*	25,870	6,176
Total cases seen in A&E	3,945	1,535	3,221	1,671
Total Hospital Discharges	4,066	506	4,128	419
Average Length of Stay	9.9	9.5	*	16.7
Total CMH Clinic Cases	*	2,863	*	4,125
CMH Admissions to Hospital	*	*	*	46
Home Visits – Total Cases	*	*	*	1,745
- Emergency	*	*	*	141
Outpatient Clinic – Total	23,440	5,310	25,990	6,756
New Cases	2,385	297	2,413	232
Child Guidance Clinic – Total Cases	798	309	922	375
OPD Clinic Cases - New	165	0	287	140
Attempted Suicide Seen in A&E	3	0	0	0
10 – 19	46	5	50	16
20 – 29	46	5	33	4
30 – 44	32	15	13	1
45 – 64	9	4	5	1
65 & over	7	3	4	0
Age Unknown	2	0	2	1

Source: MOH MCSR, HMSR, MOH Annual Reports 2000-2001, WRHA CMH Reports 2001
*DNA

In year 2001, there were 25,870 visits to PHC facilities nationally (6,176 in WRHA) for psychiatric complaints. Although fewer patients (18.4%) sought care nationally at A & E in 2001, the picture at WRHA demonstrated an increase of 8.1%. (Table 3.23)

The Community Mental Health (CMH) clinic cases increased by 30.5% in WRHA and 46 cases were admitted to hospital in 2001 (Table 3.23)

In 2001, just about 62 more patients were discharged from hospital for psychiatric conditions nationally, while there were 87 less discharges at WRHA

level. Average length of stay at WRHA was 16.7 days in 2001. Total home visits cases in the region in 2001 was 1747 with 141 being for emergency care (Table 3.23).

Outpatient psychiatric cases increased by 2,550 nationally and 1446 at WRHA in 2001. There were an additional 28 cases nationally while WRHA showed a decline of 65 cases (Table 3.23)

In 2000, 798 cases were seen in child guidance clinics nationally but in 2001 the numbers of cases increased by 124. At WRHA however, there were 22 less cases in 2001(309 cases in 2000). While there were 165 new cases nationally in 2000, there were none in WRHA. By 2001, WRHA saw 31% (287) of the 922 cases seen nationally and 140 of the 375 new cases (Table 3.23).

Attempted suicides was highest among the 10 – 19 (46), 20 – 29 (46) and 30 – 44 (32) age groups nationally; while in WRHA it was among the 30 – 44 age group (15). Year 2001 saw an 8% increase among the 10 -19 age group, and a decrease among the 20 – 29 (28.2%) and 30 – 34 (40.6%) age groups nationally. There was a marked increase (320%) among the 10 – 19 age groups at the WRHA level (Table 3.23).

Table 3.24 Morbidity Profile – Community Mental Health: WRHA 2000-2001

CONDITIONS	2000	2001
	WRHA	WRHA
Psychotic Disorders		
- On Register	1,500	1,679
- % Receiving Consistent Care	*	73.3*
Mood Disorders	500	525
Organic Mental Disorder/Anxiety Disorders of Childhood & Adolescence	*	*
Disorders of Childhood & Adolescence	147	866
Post Traumatic Disorders	*	*
Other Disorders	*	*
Substance Abuse Cases	150	150
- Rehabilitation		
- No. Screened	*	44
- No. Admitted	*	30
- No. Drop Out	*	21
- No. Graduating	*	3
- Recidivism	*	*

Source: WRHA CMH Report; MOH Jamaica, Annual Report 2000-2001

* Hanover and St. James only

When compared to year 2000 data, 2001 data revealed an increase in most cases of psychiatric illness in WRHA CMH clinics – Psychotic Disorders (25%), Mood Disorders (4.8) and Disorders of Childhood and Adolescents a five fold increase. (Table 3.24)

Substance abuse remained constant at 150 cases in 2000 and 2001. The integrated approach to the management of substance abuse through the treatment and Rehabilitation Programme saw 44 cases being screened and 68% (30) being admitted. Seventy percent (70 %) (21) dropped out of the programme and 3 (10%) graduated. (Table 3.24)

3.1.3.7 EMERGENCY HEALTH SERVICES

**Table 3.25 Status of Emergency Health Services – Several Variables:
Jamaica and WRHA 2000-2001**

VARIABLES	Base Year 2000		2001	
	Jamaica	WRHA	Jamaica	WRHA
Primary Health Care Visits for Injuries	37,395	9,529	29,757	6,898
Casualty/A&E Attendance Total	643,101	129,289	667,321	137,163
- Percent Receiving Care	97.8	94.7	98.1	96.5
- Admitted	85,888	14,213	88,478	15,805
Treatments Given in Casualty				
- Total	603,805	193,957	632,031	42,469
- Sutures	14,468	6,726	23,779	7,524
- Dressing	76,503	11,393	78,935	13,799
- Injection	196,994	59,447	209,327	66,566
- Nebulization	119,971	35,383	118,959	34,210
- Other	169,694	76,116	185,193	84,948
Leading Emergency Surgeries				
- Total Cases	12,952	2,761	13,906	2,542
- General Surgery	5,109	907	5,309	819
Specialist :				
- Obstetric	4,055	1,350	3,885	1,092
- Emergency Tubal Ligation	347	58	462	79
- Other Gynaecological	1,508	136	1,662	164
- Urology	140	15	147	9
- Orthopaedic	796	137	1,149	198
- Dental	24	16	60	33
- ENT	394	99	514	98
- Eye	464	36	310	45
- Plastic	35	7	37	3
- Other	115	-	269	2
Minor Operations (Casualty)	14,468	4,892	15,843	5,422

Source: MOH MCSR, HMSR, WRHA CMH Report

When compared to year 2000, two of the variables related to the status of emergency health services demonstrated several changes in 2001. While visits to primary health care facilities for injuries declined nationally (20.4%) and WRHA (27.6%), the total numbers of cases seen in public A&E departments increased 3.6% nationally and 5.7%

at the WRHA level. Of the 137,163 cases seen in WRHA facilities 95% received care and 15,805 of these case were admitted to hospital. (Table 3.25)

Total treatment in casualty increased by 28, 231 in 2001 at the national level and also at WRHA level (18,512). While major treatment – Sutures (39.1%), Dressing (3%) and Injections (6%) increased at the national level, WRHA mirrored the pattern of increases in Sutures (10.6%); Dressing (17.4%); Injection (10.7%). Nebulizations demonstrated declines at the National (1.2) and WRHA levels (1,173). (Table 3.25)

Among the 13,906 cases receiving emergency surgical operations at the national level in 2001, there were increases above the 2000 figures for General Surgery (3.8%), other Gynaecological Conditions (9.2%) and orthopaedic cases (30.7%). At the WRHA level, 2,547 cases were managed in 2001 (9.2% less than 2000) and there were declines in General Surgery (9.7%) and obstetric conditions (19.1%). At this level however, there were increases in other Gynaecological conditions (17%) and orthopaedic (30.8%). (Table 3.25)

The increases in minor operations done in casualty in 2001 were at the national (8.7%) and Regional levels (9.8%) (Table 3.25).

Table 3.26 Morbidity Profile in Public Hospital A&E Departments: Jamaica and WRHA 2000 – 2001

Condition Treated By Cases	Base Year 2000		2001	
	Jamaica	WRHA	Jamaica	WRHA
Gastroenteritis	23,406	4,202	17,492	3,137
URII	24,834	5,887	27,044	6,919
LRTI	9,887	1,606	10,397	1,676
Asthma	40,237	6,364	39,415	6,119
Medical Conditions	243,654	37,489	233,996	42,689
Surgical Conditions	36,271	15,433	36,857	16,691
Ob/Gyn Conditions	23,027	7,468	25,044	9,011
GU Conditions	15,257	2,683	15,398	3,000
Paediatric	94,836	18,988	114,233	22,775
Psychiatric Conditions	3,45	1,535	3,221	1,671
Psychiatric Crisis Intervention	-	-	-	141
Intentional – PHC	5,047	1,299	3,991	862
Total – Casually	29,963	6,372	34,080	6,720
Unintentional – PHC	32,348	8,230	25,766	6,036
Total Casualty	43,329	10,275	44,749	12,148

Source MOH: MCSR, HMSR

When the A&E morbidity profile for year 2001 was examined the data reflected national decreases in the cases of Gastroenteritis (25.3%); Asthma (2%), Medical Condition (4%) and Psychiatric Conditions (18.4%) when compared to the base year 2000. At the WRHA level declines were visible only for Gastroenteritis (25.3%) and Asthma (4%). At that level too, the five major conditions treated in A&E departments included Medical Conditions (42,689), Paediatric Conditions (22,775), Unintentional Injuries 6,035 for PHC and 12,148 for Hospital. Surgical Conditions (16,691) and Obstetric Gynaecological conditions (9011) represented fourth and fifth respectively. (Table 3.26)

Table 3.27 Profile of Injuries Treated in Public A&E Departments: Jamaica and WRHA 2000-2001

Injuries By Type	Base Year 2000		2001	
	Jamaica	WRHA	Jamaica	WRHA
Intentional - Total	29,963	6,372	34,080	6,750
- Stab Wound	3,821	480	3469	610
- Gunshot	1,229	117	1,385	135
- Blunt Injury	9,578	2,639	13,981	2,716
- Sexual Assault	1,123	252	1,178	283
- Laceration	*	*	10,682	2,262
- Other Assault	3,296	369	2,695	608
- Bite (Human)	482	122	523	99
- Burns	45	13	70	14
- Attempted Suicide	145	34	117	23
Unintentional - Total	32,345	10,275	44,749	12,148
- MVA	11,658	2547	11,954	3,002
- Lacerations	15,589	4713	15,244	4,692
- Bites	3,227	680	4,085	832
- Burns	1,852	332	1,889	390
- Poisoning	1,381	255	12,95	285
- Falls	*	*	10,236	2,940
- Near Drowning	*	*	46	8

Source MOH: HMSR 2000, 2001

*DNA

Although data for Laceration were not available, when national base year data was examined, the major cases of intentional injuries included Blunt Injuries (9,578); Stab Wounds (3,821), Other Assault (3,296), Gunshot Wounds (1,229) Sexual Assault (1,123), Bites (482) and Attempted Suicide (145) (Table 3.27).

The cases of intentional injuries seen in WRHA Casualty facilities in 2000 were consistent with the national ranking for Blunt Injuries, Stab Wounds and Other Assaults. In 2001 however, at the national level Blunt Injuries increased by (4,403). Lacerations were (10,682), Stab Wound (3,469), Gunshot Wounds (1,385), Sexual Assault (1,178), completed the leading causes of Intentional Injuries. (Table 3.27)

At the WRHA level the rank was somewhat different in 2001 reflecting Blunt Injuries (2716), Lacerations (2,262), Stab Wounds (610), Sexual Assault (283) and Burns (140). (Table 3.27)

3.2 MORTALITY

3.2.1 MORTALITY PROFILE

Table 3.28 Mortality Profile: Jamaica and WRHA 2000-2001

VARIABLES	Base Year 2000		2001	
	JA	WRHA	JA	WRHA
Inpatient Deaths	6,446	1,073	6,577	1,131
Casualty Deaths	840	134	870	133
Anaesthetic Deaths	1	0	1	0
Still Births – Total	899	163	863	146
- Hospital	878	160	850	144
- Community	21	3	13	2
Foetal Death Rate/1000	18.4	17.7	18.8	16.5
Early Neonatal Death Rate/1000	11.5	8.2	12.4	11.6
Perinatal Death Rate/1000	29.7	25.8	31.0	27.9
Infant Death Rate	19.9	*	19.9	*
Maternal Deaths (Total)	47	10	35	5
- in Community	14	2	4	0
- in Hospital	33	8	31	5
Maternal Death Rate/100000	70.0	90.0	70.8	57.9

Source: MCSR, HMSR, STATIN: Demographic Statistics 2000-2001

* DNA

Community births and deaths represent those births and deaths in communities monitored by government health professionals.

There were 1,131 inpatient deaths in WRHA hospitals in 2001 (Table 3.28).

Approximately 15.3% of all casualty deaths occurred in the WRHA hospitals and there were no anaesthetic deaths in 2001. While 16.9% of all still births in hospitals occurred in the WRHA in 2001, the region accounted for two (2) of the thirteen (13) that occurred at the community level nationally (Table 3.28).

When compared to the base year, no maternal deaths occurred at the community level in WRHA in 2001. However, five of the 31 maternal deaths that occurred in public hospitals were in that region (Table 3.28).

Table 3.29 Mortality Profile: Jamaica, WRHA and Parishes 2001

VARIABLES	Jamaica	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Registered Deaths	16,204	2,955	401	1,338	301	915
Inpatient Deaths	6,577	1,131	123	621	76	311
Casualty Deaths	870	133	7	87	19	20
Anaesthetic Deaths	1	0	0	0	0	0
Still Births – Total	863	146	*	*	*	*
- Hospital	850	144	9	93	3	39
- Community	13	2	1	1	0	0
Foetal Death Rate/1000	18.8	16.5	12.5	19.6	5.3	14.4
Early Neonatal Death Rate/1000	12.4	11.6	0	15.7	5.4	9.0
Perinatal Death Rate/1000	31.0	27.9	12.5	35.0	10.7	23.2
Infant Death Rate	19.9	*	*	*	*	*
Maternal Deaths (Total)	35	5	0	5	0	0
- Community	4	0	0	0	0	0
- Hospital	31	5	0	5	0	0
Maternal Death Rate/100000	70.8	57.9	*	106.8	*	*

Source: MOH – MCSR, HMSR 2001

*DNA

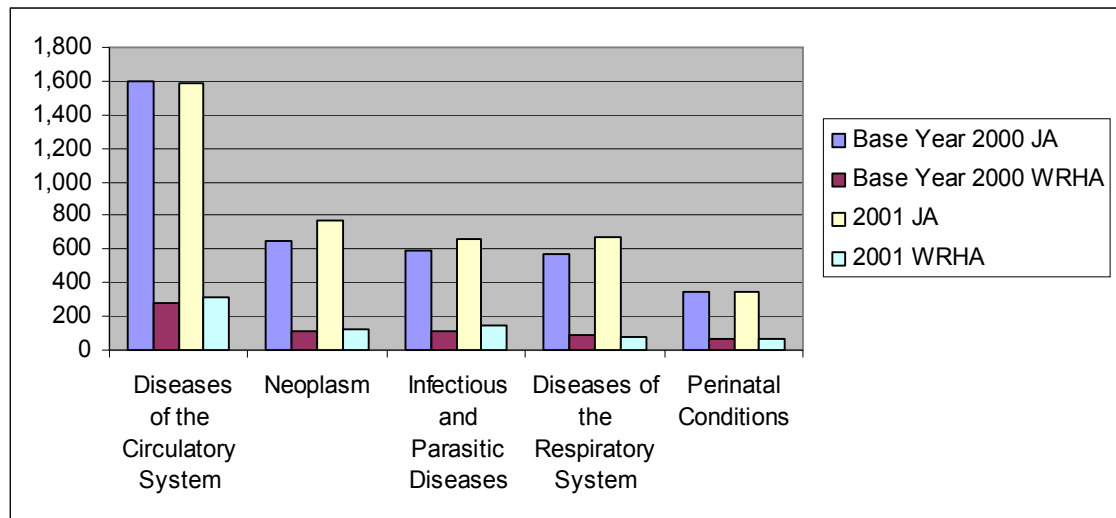
Community births and deaths represent those events monitored by public sector health professionals.

While there were no anaesthetic deaths in the WRHA, sixty five point five percent (65.5%) of all casualty deaths in the region occurred in the parish of St. James (Table 3.29).

3.2.2 INPATIENT MORTALITY

Among the hospital deaths occurring in the WRHA in 2001, the leading causes included Diseases of the Circulatory System (312), Infectious and Parasitic Diseases (146), Neoplasm (126), Diseases of the Respiratory System (83) and Perinatal Conditions (76) (Figure 3.1). The rank order did not mirror the national picture (Figure 3.1). (TABLE B1)

Figure 3.1 Inpatient Deaths in Public Hospitals by Five Leading Diagnoses: Jamaica and WRHA 2000 - 2001



Source: MOH – HIS 2000-2001

**Table 3.30 Inpatient Deaths in Public Hospitals by Five Leading Diagnoses:
Jamaica, WRHA and Parishes 2001**

DIAGNOSIS	Base Year		PARISHES			
	JA	WRHA	Trelawny	St. James	Hanover	Westmoreland
TOTAL INPATIENT DEATHS	6,577	1,131	123	621	76	311
Diseases of the Circulatory System	1,583	312	33	126	37	82
Neoplasm	775	126	7	72	4	27
Infectious and Parasitic Diseases	658	146	16	78	7	23
Diseases of the Respiratory System	672	83	41	156	5	26
Perinatal Conditions	459	76	-	49	-	26

Source: MOH HIS

In 2001, the five leading causes of death in WRHA numbered 743, just about 18% of the similar causes at the national level. The rank order differed at regional and parish levels with St. James having the largest number of deaths from Diseases of the Respiratory System, approximately 23% (156) of the national figure (Table 3.30).

4.0 PERFORMANCE

4.0 PERFORMANCE / ACHIEVEMENT BASED ON SERVICE LEVEL AGREEMENT (SLA)

The WRHA signed a Service Level Agreement with the Ministry of Health to achieve the objectives outlined below:-

OBJECTIVES

1. Provide quality preventive, curative, rehabilitative care that is accessible, reliable and affordable through:-
 - improvements in:-
 - environmental health
 - dental health
 - the control of communicable disease
 - the control of sexually transmitted infections
 - the control of chronic non-communicable diseases
 - reproductive health family planning
 - mental health care

 - decrease in morbidity and mortality among children, adolescents and women

The accompanying tables represent the performance matrix which is a mix of the specific SLA's and other achievements.

Table 4.1 PERFORMANCE / ACHIEVEMENT – WRHA 2000 – 2001

4.1A MANAGEMENT

INDICATORS	Base Year 2000	Target 2005	ACHIEVEMENTS
			2001
No. of Internal Audits			
Finance (FAA Act)			
- No. of Audit Queries			
- No. of Audit Queries satisfactorily resolved			
- No. of Audit Queries pending/outstanding			
Cost Containment			
- Administrative cost as a % of budget		6%	5%
- Staff cost as a % of total service delivery cost		73%	85%
- Annual costs \$'000 (Actual)			
- Rental			1,683
- Utilities			46,155
- Petrol			
- Fee collection as a % of billing (excluding indigent)		<55%	72%
- Billing as a % of services rendered		>95%	97%
- X-Ray films - % wastage			8,802
Human Resource			
- Human Resource Planning Career Path		50%	25%
- Succession Planning			
- Training Plan			
- Maintain/improve recruitment, Selection, Promotion, Transfer Standards	100%		100%
- Personnel files to be current on appropriate database	80%		60%
- Health and Safety	80% Compliance		50%
- Performance Incentive Scheme	50% Compliance		-
- Consistent Attendance	100%		60%
- Absenteeism excluding approved leave	3%		
- Ensure compliance for professional registration/re-certification	100%		100%
- Annual performance appraisal	75%		-
Industrial Relations			
- Management and Supervisory personnel on point with grievance procedures and its implementation		100%	100%
- Maintain harmonious employee relations to minimize disruption of services			
- Compensation and benefits implemented in accordance with government standards and statutory bodies		100%	100%
The Infrastructure			
Maintenance - Plan			Building
- All activities			2,486
PPM Programme - % Vehicles			100%
- % Critical equipment			40%
PPM Activities - Critical equipment			487
- Vehicles			-
% Downtime (Annual)			

- Standby Generators			4%
- Elevators			15%
- Boilers			3%
- Laboratory Equipment			8%
INDICATORS	Base Year 2000	Target 2005	ACHIEVEMENTS 2001
- X-ray Equipment			4%
- Anaesthetic Equipment			5%
- Autoclave/Sterilizer			14%
- Operating Table			9%
- Operating Theatre Lights			9%
- Operating Theatre Equipment			5%
- Laundry Equipment			23%
- Central Air Conditioning			21%
- Incinerator			14%
Average annual downtime-vehicles(days)			22
Quality Assurance			
- Clients Charter			
- Developed			
- Operational			
- Development of Benchmarks			
Average waiting time - Health Centre			
- Hospital A&E			
- OPD			
- For specialist Consultation			
- Surgery			
- % Satisfied patients			
Risk Management			
- Total no. of complaints			98
-No. of complaints acknowledged within 7 working days			
- No. of complaints satisfactorily resolved			75
- No. of complaints pending			23
- No. of complaints resulting in litigation			
- Post-operative wound infection			22
No. of :-			
- Medication error			
- Falls			
- Wound Infection (Post operative)	15		22
- Prescription errors			
- Dispensing errors			
- Bedsores			
- Medical record without summaries			7,341

Source: MOH – MCSR; HMSR; WRHA 2000-2001

4.1 PERFORMANCE / ACHIEVEMENT – WRHA 2000 – 2001

4.1B SERVICE DELIVERY

INDICATORS	Base Year 2000	Target 2005	YEAR 2001
Visits			
- Health Centre Referrals to A&E	1.8		2.5
- % Self Referral to A&E	92		87.0
- Ratio of PHC to A&E	9:10	30:1	
- Attendance for - Asthma (All) A&E	6,364		
- Dressing (All)A&E	11,393	13,799	
% Availability Critical Drugs - PHC		60%	
- IV Fluids			
- Antibiotics			
- % VEN List Drugs Available (PHC)			
- Average Stock Out Rate (PHC)			
- For Chronic Diseases			
- Asthma/RTI			
- Cancer			
- Cardiovascular			
- Diabetes			
Surgery - Total	9,560		10,108
- Elective	4,633		4,767
- Day	2,088		2,781
- No. of eye operations		↑ 5%	
- % Abstract completed in X days			
- Discharge			
- Deaths	100%	100%	

Source: MOH; MCSR; HMSR; MOH Jamaica, Annual Report 2000 -2001

* DNA

4.1 PERFORMANCE / ACHIEVEMENT - WRHA 2000 - 2001

4.1C DENTAL HEALTH

INDICATORS	Base year 2000	Target 2005	2001
DMF Index			
- Restorative procedures			43,084
- Extractions			13,403

Source: MOH MCSR

4.1 PERFORMANCE / ACHIEVEMENTS – WRHA 2000– 2001

4.1 D ENVIRONMENTAL HEALTH

INDICATORS	Base year 2000	Target 2005	ACHIEVEMENTS
			2001
- % Access to potable water	79%		77%
- % Waste water plants inspected and sampled			
- % Tourist Establishments Health Certified		70%	31.5%
- % Food Handling Establishments Certified		70%	
- % New Applicants issued with Food Handlers Permit within 3 weeks			
- % Food Borne illnesses investigated within 2 weeks			
% Institution Satisfactory			
- School			53.8%
- Children's Home			
- Places of Safety			1%
- Lock- Ups			14%
- Hospitals			12%
- Nursing Homes			3%
% Compliance with Enforcement Actions			50%
Vector Indices (Barrier Zoo)		0	1.75

Source: WRHA Parish Reports

4.1 PERFORMANCES / ACHIEVEMENT – WRHA 2000-2001

4.1E COMMUNICABLE DISEASE CONTROL

INDICATORS	Base year 2000	Target 2005	2001
Acute Flaccid Paralysis - No of Cases investigated within 48 hours		100%	
TUBERCULOSIS			
- Total cases confirmed			
- % reported cases investigated within 6 weeks			
- % Confirmed cases completing DOTS treatment			
- Tb Death Rate			
- Number of Cases of Malaria			
- Malaria Death Rates			
STI			
- % STI Clients counselled and tested for HIV			
- Syphilis			
- Confirmed Primary Case			
- Confirmed Secondary Case			
HIV			
- No. PLWA on ARV			
- % PLWA on ARV			
No. of cases of Fever & Rash investigated within 48hrs			

Source: WRHA Parish Reports

4.1 PERFORMANCE / ACHIEVEMENTS – WRHA 2000-2001

4.1F CHRONIC NON-COMMUNICABLE DISEASES

INDICATORS	Base Year 2000	Target 2005	2001
ASTHMA	6,364		61,191
- Visits to PHC	*		1,543
Cases seen in A&E			
CANCER			
No. of Population			
- Receiving Pap Smears	*		4,653
- With Invasive Ca Cervix	*		340
- Receiving Prostate examination	*		185
- Breast Examination	*		10,811
CARDIOVASCULAR DISEASES			
- PHC Visits for Hypertension	25,816		25,591
- Other Cardiovascular Diseases	2,672		2,770
- Chronic Rheumatic Heart Disease	1,043		1,100
- Cases seen in A&E			34,210
DIABETES MELLITUS			
- Visits to PHC	7,163		6,902
- No. of eye operations for cataract	*	*	*
- No. of leg ulcers	*		326
DIABETES & HYPERTENSION			
- PHC Visits	11,952		12,607
OTHER MONITORED DISEASES			
- RTI (Excluding Asthma)	*		11,952
- Other Gastro-intestinal Disorders	*		3,512

Source MOH: MCSR, HMSR

* DNA

4.1 PERFORMANCE / ACHIEVEMENT – WRHA 2000 – 2001

4.1G CHILD & ADOLESCENT HEALTH

INDICATORS	Base Year 2000	Target (2005)	2001
Cases of Ophthalmia Neonatorum			
Cases of Congenital Syphilis		25% ↓	
% HIV Exposed Infants			
% HIV Exposed Infants receiving ARV		78%	
% Low Birth Weight (community + hospital) Below Normal	1,081		1,020
Nutritional Status 0 – 35 months	68		39
% Exclusive Breastfeeding at			
- 6 weeks	2,505	60%	4,781
- 12 weeks	*		3,348
Immunization Coverage			
- BCG	94.0	95%	98.6
- DPT	91.1	95%	98.1
- OPV	90.6	95%	96.0
- MMR	86.6	95%	85.2
- Hepatitis B.	0.4		
- Haemophiles Influenzae B	0.3		0.1
No. of A&E visits for Asthma in the < 5 yr old	1,554		1,203
Hospital Discharge for GE			
Still Births - Hospital	160	10% ↓	144
- Community	3		2
Perinatal Death Rate/1000	25.8	22	27.9
Case fatality rate for GE			
Mortality Rates – Infant Death	19.9		19.9
- under 5 yrs			
Number of Children Orphaned by HIV/AIDS			
% for Secondary Coverage for Rheumatic Fever	1,100 / 2,513		984 / 2290

Source: MOH MCSR; HMSR

* DNA

4.1 PERFORMANCE / ACHIEVEMENT WRHA 2000 - 2001

4.1H REPRODUCTIVE HEALTH

INDICATORS	Base Year 2000	Target (2005)	2001
- % Anaemic pregnant women adequately treated	*		72.6
- % Syphilis positive pregnant women adequately treated	*		45.9
- % Antenatal women tested for HIV		↓ 10%	
Antenatal Women HIV Positive			
- Total			
- %			
- 15 – 25 yrs			
% HIV positive pregnant women receiving ARV for PMTCT		78%	
No. of cases of Pre-Eclampsia	*		1,160
- Ante partum Haemorrhage	23		33
- Postpartum Haemorrhage	287		298
- % Deliveries Attended by Trained Personnel	*		91.4%
- C-Section Rate	10.2		
- No. of Postnatal Women Accepting Family Planning Method	28,136	70%	5,499
% increase in Number of :		10%	↑ 0.75
- Long Term Method Users - Depo Provera Injection	*		1871
- IUD	*	15%	(11)
(Hospital) – Tubal Litigation	672		583
Condom Use	1,545		1,558
Maternal deaths investigated within X weeks	*	100%	*
Maternal deaths / 100.000 (Hospital)	8	↓ 80%	5

Source: MOH MCSR; HMSR; 2000-2001 WRHA SLA

* DNA

4.1 PERFORMANCE / ACHIEVEMENT – WRHA 2000 – 2001

4.1I MENTAL HEALTH

INDICATORS	Base Year 2000	Target 2005	2001
- % of Schizophrenic patients receiving consistent treatment		75%	*
- Average length of stay for psychotic patients	9.5	14 days	16.7
No. of patients with chronic illness screened for depression	*	75%	*
No. of patients diagnosed and treated for depression	*		*
No. of new patients treated for substance abuse			

Source: MOH HMSR, WRHA CMH Report

APPENDICES

**TABLE A1: Utilization of Accident & Emergency Services: WRHA
2000- 2001**

Hospital Services Accident & Emergency	Base Year	2001
	2000	
- Total Attendance	129,289	137,163
- Total Self-Referral	118,921	124,622
- Total Receiving Care	122,388	132,426
- Registered & Not Seen	6,900	4,737
- Total Admitted	14,213	15,805

Source - MOH: HMSR

TABLE A2: Utilization of Surgical Services WRHA 2000 – 2001

Surgery	Base Year 2000	2001
Total	9,560	10,108
Type - Elective	4,633	4,767
- Emergency	2,761	2,542
- Day	2,088	2,781
- Minor (Out-patient)	78	18

Source – MOH: HMSR

TABLE A3: Utilization of Outpatient Specialist Clinics WRHA 2000 -2001

Outpatient Specialty Clinic	Base Year 2000	2001
- Number of Clinics	2,076	1,968
- Number of Cases - Total	90,751	92,172
- New	12,435	14,167

Source – MOH: HMSR

TABLE A4: Utilization of Radiography Services: WRHA 2000 - 2001

VARIABLES	Base Year 2000	2001
- Number of Clients		
- Total	22,076	32,777
- Outpatients	19,169	28,381
- Inpatients	2,907	4,396
- Number of examination	28,837	44,021

Source – MOH: HMSR

TABLE A5: Utilization of Pharmacy Services: WRHA 2000 – 2001

VARIABLES		Base Year 2000	2001
Pharmacy	PHC	25,036	21,603
- Total number of clients	Hospital	48,984	103,975
- Items prescribed	PHC	75,712	61,525
	Hospital	133,061	261,834
- Items dispensed	PHC	56,130	48,231
	Hospital	112,535	215,439

Source – MOH: MCSR & HMSR

TABLE B1: Inpatient Deaths in Public Hospitals by Five Leading Diagnoses: Jamaica and WRHA 2000-2001

DIAGNOSIS	Base Year 2000		2001	
	JA	WRHA	JA	WRHA
Diseases of the Circulatory System	1,595	278	1,583	312
Neoplasm	643	110	775	126
Infectious and Parasitic Diseases	594	114	658	146
Diseases of the Respiratory System	572	91	672	82
Perinatal Conditions	415	75	459	76
Total Inpatient Deaths	6,446	1,073	6,577	1,131

Source: MOH – HIS

GLOSSARY

A&E	Accident & Emergency
AFP	Acute Flaccid Paralysis
AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Clinic
ARV	Anti-retroviral (Drugs)
BCG	Bacille Calmette Guerin
CMH	Community Mental Health
C-Section	Caesarean Section
CVD	Cardiovascular Disease
DMF	Decayed, Missing, Filled (Teeth)
DNA	Data Not Available
DPT/DT	Diphtheria, Pertussis, Tetanus/Diphtheria, Tetanus
EPI	Expanded Programme for Immunization
GU	Genito-urinary
Hib	Haemophilus Influenza Type B
HIV	Human Immuno-deficiency Virus
HMSR	Hospital Monthly Statistical Report
IUD	Inter Uterine Device
JA	Jamaica
MCSR	Monthly Clinical Statistical Report
MMR	Measles, Mumps, Rubella

MOH	Ministry of Health
MO(H)	Medical Officer (Health)
MVA	Motor Vehicle Accident
NGO	Non Governmental Organization
OB/GYN	Obstetrics/Gynaecology
PID	Pelvic Inflammatory Disease
PTA	Parent Teachers Association
RD	Regional Director
RTD	Regional Technical Director
SLA	Service Level Agreement
STI	Sexually Transmitted Infection
Tb	Tuberculosis
WRHA	Western Regional Health Authority

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 - Westmoreland